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JULY

1915



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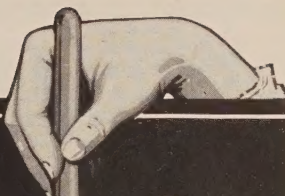
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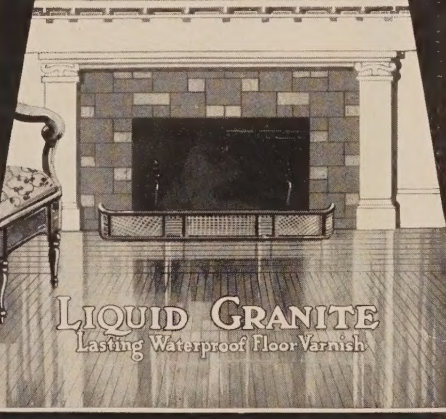
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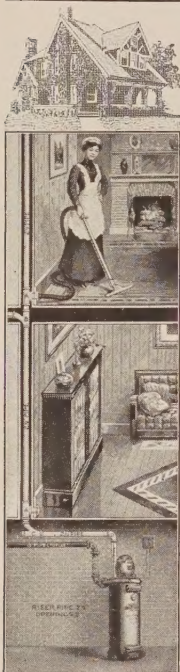
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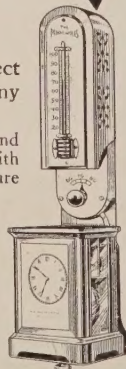
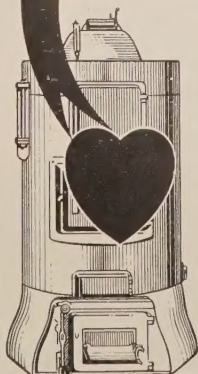
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KEITH'S MAGAZINE

ON HOME-BUILDING

M. L. KEITH, Editor and Prop.

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Just a Word

Preventable Fire Waste.



WHEN you are building your home, build to avoid fire risks. See how your flues are actually built. A vitrified tile flue lining from the basement through the roof will make trouble from defective flues less probable. A flue lining has its advantages, for a brick chimney with a tile lining does not require as much space as a solid brick chimney wall. With the best laid brick work, a settlement of the wall is likely to open a crack in the brick work and expose surrounding work. It has been estimated that 13 per cent of the total number of fires in this country are attributed to defective flues. No timber work of a house should come within an inch of the flue proper. All floors and walls should be framed around the chimney with at least an inch of space between. A brick arch should be turned under the hearth of a fireplace, so that no wood shall come within twenty inches of an open fire.

If a frame house is built, as is often the case so that the studding is open from the basement wall to the plate at the roof, each section of studding forms a flue which would be likely to "draw" in case a fire should start under it. Fire "stops" at each floor make a good construction; and prevent rats and mice from having a free run in the walls, as well.

Electric wiring is supposed to be the cause of innumerable fires. When live wires have only their own insulation between them and combustible material, a short circuit or a flash of lighting is likely to make trouble. All electric wiring should be placed in non-conducting tubes and if properly done will not be the cause of fire.

Is there a bunch of shavings, old papers, dried grass or leaves, piled up against your barn where a tramp might happen to throw a match after he had lighted his pipe? If you leave it there, do not blame the tramp when the barn burns.

Your property is fully insured against fire and perhaps you do not fear any loss from that cause. How much premium do you pay annually? The amount is a tax which the fire fiend collects from you to pay for your neighbor's carelessness and to replace the vast actual waste each year from the material and the labor that goes up in smoke.

The most appalling thing about it is that much of this waste is preventable, and yet continues from year to year.

KEITH'S MAGAZINE

ON HOME BUILDING

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A beautiful garden setting which overlooks a pool and flower beds and the water beyond.

Making the Ideal Country Home from An Old House

Warfield Webb



THE idea of changing the old home into a modern structure did not at first dawn upon the purchaser of this old farm house and the adjoining land. In fact the original plan considered, which had been given careful study, was to use the old house as a home for the farm superintendent, and to erect at some distance, a new home with all the modern ideas incorporated therein. It was while planning the new house, during the owner's residence there for several summers, that the possibilities of remodeling the old house were conceived.

Now this is a subject that always demands care and very special forethought. Should the plans be undertaken and the scheme then found to be impracticable, there will follow a loss that is not readily appreciated.

In this case the owner called into consultation his brother, who is an architect, and the matter was carefully considered and preliminary plans for a new home prepared. But in the meantime the old place had developed latent possibilities, and an inspection of these revealed that it had been built to withstand the ravages of time, and was intact, so far as the essential parts were concerned.

The structure was studied, not only as to the construction but also as to the needs of the new owner, and what was possible to work out of the present build-

ing without any undue loss of time or serious errors. The original part of the house, that is the section without the rear wing, was built about seventy-five years ago. The latter was erected something like twenty years ago, and a careful inspection proved that the beams and joist were of solid oak and in fine condition.

The house itself was of an old fashioned type, very common half a century ago in Ohio, where it is located, and was easily remodeled on colonial lines, which was the style most desired by the owner. The general plan then determined upon was the colonial type. The rooms were large and fairly well arranged, so that the labor of remodeling was made less complicated. In the planning several different ideas were suggested for the first floor. One of these was to arrange a center hall, with living room and dining room on opposite sides, and a colonial stairway in the hall. Another suggestion was to make a large living room across the entire front by removing the center partition. Neither of these ideas seemed just the plan desired, and they were abandoned for the one that was finally determined upon. It was found that should the above plans be adopted they would involve extensive changes, owing to the framing of the house, which was of the old fashioned barn-frame type, and the removal of any of the partitions would weaken the frame

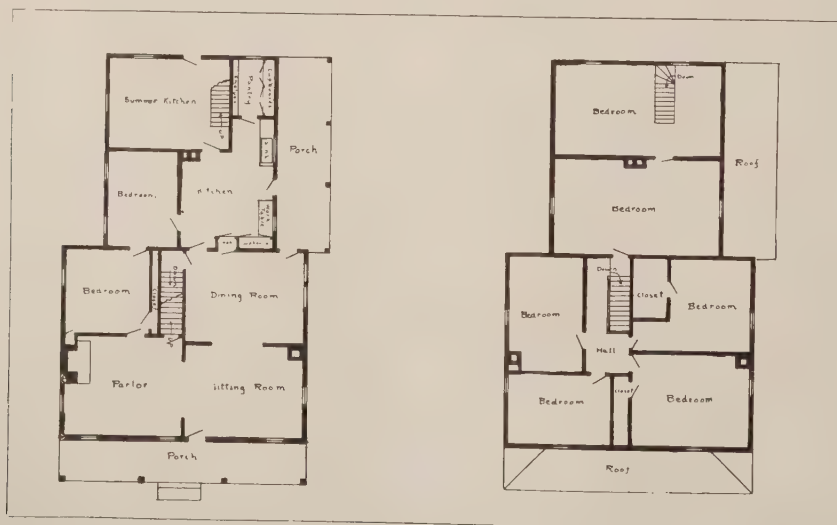


A view of the old farm house—before being remodeled.

of the house perceptibly.

The final plan determined upon was to leave all the partitions practically as first placed, and by adapting the various rooms to new uses, it was possible to se-

cure a modern home, combining the comforts and latest ideas, with only a nominal cost; far less than would have been demanded for the erection of a new home, and which would have lacked the charm



Floor plan of the farm house



The new house—after being remodeled.

given by time that is now so strong an element in the present structure.

In planning a change for the front exterior, it was decided to build a two-story portico across the entire front. The

change made the entire house an ideal one from this viewpoint. The addition of a sun room on the east side, and the further construction of a rear wing on the west side on a line with the main structure,



First floor plan.

The remodeled house.

Second floor plan.

completed the exterior changes in the original planning.

When the interior plans were studied, it was noted that the old dining room was too small for the owner's requirements, so it was converted into a farm office; it being found the best adapted for this purpose, having an outside door to the rear porch. As an office was an essential feature here, the plan worked out

one of the most pleasant and generally used rooms in the house. It has windows on three sides, but with an open fireplace and ample radiation it is comfortable in all kinds of weather, and is a dream spot for the weary. The window from the living room on this side of the house, was converted into an opening, with double French doors, thereby giving access to this room. The former sitting room and



A view in living room, showing boulder fireplace.

admirably. The removal of the old pass cupboard to the kitchen and the building of a partition dividing the space permitted the building of a book case for office use therein.

The original opening to the sitting room from this apartment was closed and the erection of another book case, five feet high, was made possible. The space above the book case to the top of the door was filled with leaded glass casement sash, making thereby an additional artistic factor to both rooms. The sun room, opening from the living room, is

parlor are now used together as a living room, there having previously been a wide opening between these rooms.

Now in order to give the house an added feature of attractiveness, the chimneys at each end were torn out and new ones were erected from the cellar up, on the outside of the house; which while making a pretty addition avoided the corners projecting into the upstairs chambers, as they did in the old house. There were two new fireplaces built in the house, one in the living room, and one in the sun room. These fireplaces are of boulder



Oak paneled wainscoting and beamed ceiling.

type, and while not typically colonial, are none the less appropriate in the section where the house is located, there being found in that part of the country some of the finest boulders in America. Then the boulders used in the construction of these fireplaces were all gathered on the farm, and were laid up by a man who lives in the neighborhood, and is an expert in this kind of work. One can judge of the nature of the work by a glance at the view shown of the same.

The small bed room at the rear of the old parlor was converted into a small den or lounging room, and has also proven to be one of the pleasant features of the home. The narrow closet next to the stairs was shortened sufficiently to permit of a built-in bookcase. The bed room at the rear of this and the opening from

the kitchen was converted into the main dining room, which was also made larger by the removal of the west wall, using the additional space thus secured. This made possible a very comfortable and ample dining room. This room is finished in oak, with paneled wainscoting and beamed ceiling, having also a built-in buffet and china closet. The bay window at the west side, with seat below running its entire length, gives ample light, and adds to the comfort and the homelike ease of the apartment.

By plastering and finishing the summer kitchen at the rear of the kitchen, and the removal of the old stairway, which was placed in the addition, as well as the erection of a bathroom in close proximity of the stairs, a nice combination was made possible. This new room makes a de-

lightful dining room for the farm help, and is likewise handy to the kitchen for service. No changes were made in the kitchen. It was previously well provided with cupboards, work table, sink, pantry and other conveniences.

With the exception of the paneling in the dining room, the woodwork in all sections of the house was retained. It was, however, all refinished. With the exception of the den, which was grained in butternut finish, the other apartments were painted with white enamel, making the interior bright, clean and very attractive. New oak floors were laid in all the rooms of the first floor except the kitchen and rear dining room. A system of vapor heating was installed, also modern plumbing, with two bathrooms. Water for all purposes is supplied by means of a subterranean pumping system.

In planning the second floor there were few changes made in the arrangement of the main rooms. The two front windows in the chambers were converted into French doors, thereby giving access to the sleeping porch over the front porch. The long closet in the east front room was divided, and a door cut into it from the west room, making possible a closet for this room. Full length plate glass mirrors were placed in the closet doors in the three main rooms, which add to the cheeriness of the same. The rear bedroom on the west side was shortened sufficiently to allow for a passage to the bathroom, which was placed in the new addition in the rear. This bathroom has tiled floor and wainscoting, with pedestal lavatory, porcelain built-in bath tub, and all the fixtures of the very latest and best type.

The large bed room at the rear of the hall was converted into a billiard room,

being another of the pleasant apartments in this home. Two bedrooms were planned for the help at the rear of this; these opening off a small rear hall, communicating with the rear stairs. The woodwork in the bedrooms was finished in white enamel, the billiard room in grained wood, and the floors finished with grain effect for rugs.

As there was previously an acetylene gas plant in the house, it was determined to retain this for the time being, together with the original lighting fixtures, because the power for electric lighting will soon be installed and new fixtures will then be placed in the house. The power for the electric light is to be secured from a car line not far distant.

The total cost of the work of remodeling was in the neighborhood of \$5,650. This included everything, plumbing, waterworks, painting, excavating cellar for heater, and other details. No expense was spared to make it an ideal home and the results are such as to prove the plans have not miscarried.

As to the setting of the house and its surroundings we might add a word. In the original planning of the house there was one objectionable feature. The house was located too near the public road. To obviate this an agreement was made with the road commissioners to remove a bend in the road above and below the house, thus moving the road at least 150 feet from the house. A landscape gardener was employed to lay out the grounds, and shrubbery, trees, flowers and other attractive features were added. The setting is very pleasing, and standing as it does in an acre of lawn, there is ample room for making this an ideal country home, such as the future plans of the owner promise to develop.

Hospitality in Bungalow Furnishings

Margaret Craig



N furnishing the interior of any home, the decorator is continually aware that his choice of furniture must be consistent with the style of architecture that the house exemplifies. He knows that if the house is Mexican in type, that it should not be treated as an English cottage.

At first the bungalows were unplastered, and rough in finish; but that is true of very few of the popular bungalows of the present time. Naturally, these bungalows demanded a more rigid treatment, and the Mission furniture with its

severe and angular lines was appropriate.

Now, however, as the walls of these small homes are usually plastered, the walls are tinted in various pleasing tones, and the furnishings are less forbidding.

The question is asked by the analytical house-maker: "What are the elements that essentially make a house attractive?" The answer is always the same,—“Comfort and Hospitality.”

We all want about the same things, but different as to appearance. In the living-room we desire easy chairs; at least one table on which can be placed the late



Green and white make a cool color scheme.

magazines and some interesting literature; several bookcases near at hand; and a fireplace for extra warmth, which always adds to a family sociability. In addition to these a couch for a few minutes' rest, and several well chosen pictures to gaze into and to be wafted back to some historic times, or into the sun rays of a restful meadow. Several of the illustrations answer to these demands.

principal color note. A built-in bookcase, next lends its white lines, and its broken mass of bright-colored bound volumes adds most pleasantly to the scheme.

Most mantels are adorned in a symmetrical fashion—but here, small ornaments have superseded the formal method, and as a group have formed a successful mantel decoration.

Green sunfast curtains are used at



The bungalow with vine-covered porch.

The first living-room has none of the sombre atmosphere of the early bungalow. The walls are pale green and the ceiling is cream in tone. The woodwork is white enamel, and as there are beams across the ceiling as well as a heavy mantel piece, it is consistent finish for a bungalow interior.

Above the windows and doors the narrow lintels give some individuality to the room.

The fireplace is faced with square, greenish gray tiles, which have given the

the three groups of casement windows, and the owner keeps the room supplied with green fernery, or vases of pink, yellow, or heliotrope to carry out the color composition.

The next illustrations show one exterior and several interiors of the El Mirasol in Santa Barbara. This is a charming structure, built of white plaster, toned down by green lattice work supporting flowering vines, and made very interesting by red tile roofs, and bright flowered window boxes



El Mirasol at Santa Barbara.

Nothing expresses hospitality more alluringly than the inviting porch. The treatment at El Mirasol is unusually successful. It is low and inviting, pergola roofed and vine covered. Porch furniture has received a large amount of attention, with the growing American feeling for living, sleeping and eating out of doors. Reed and willow porch furniture has responded to the demand as an ideal material for out of doors. It lends itself both to comfort and beauty.

The porch rug is a simple matter, merely a grass mat that is soft under the foot, but a great necessity, especially with a tile floor.

The El Mirasol porch bespeaks both comfort and hospitality. The illustration shows the charm which it imparts to the house. Its simple furnishings are in



The invitation to enter.

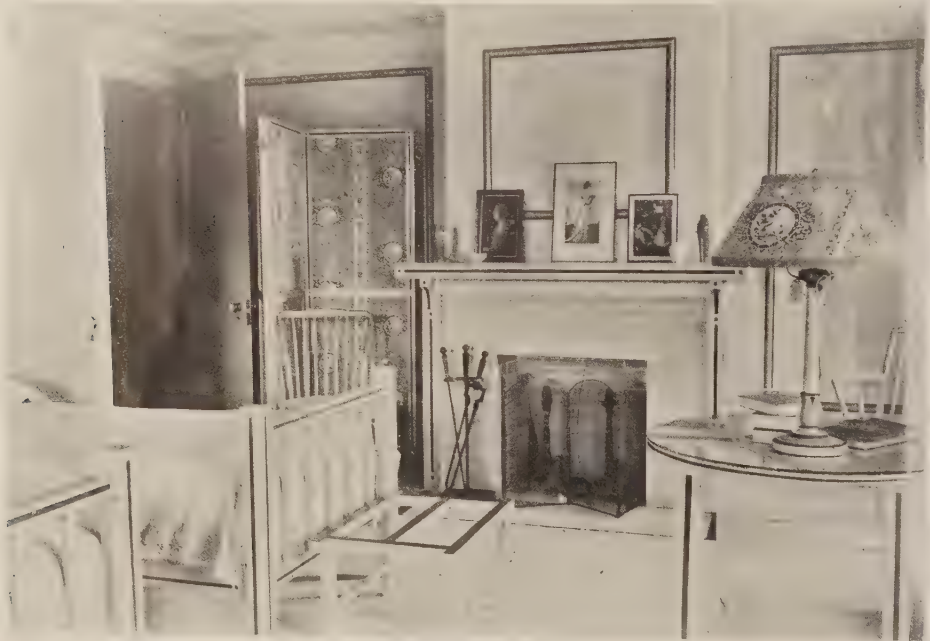
keeping with the open porch, and the simplicity of its lines and open prospect. Comfortable chairs, a table for books and papers, a wide view, roses overhead and flowers about: What more could one desire?

The interior decoration of this characteristic California home is very appropriate as well as unique. The walls are French gray, and form a lovely background for the cretonnes and English

We also realize that simplicity is evidence of the best taste.

Elaborate gold frames, an elaborate display in curtains or scarfs, and gilded chairs are of course inappropriate.

As the average bungalow is designed with careful consideration for space, built-in furniture has been adopted very extensively. Bookcases either side of the fireplace or along one side of the room;



Dark lines give an accent.

prints that are applied as draperies. Dark lines, similar to the dominant colors in these draperies outline panels on the wall and appear on the furniture as definite accents of color.

The desks are most attractive. Ivory in color to match the woodwork and most of the furniture, they are each supplied with Hesterloom lamps, which have the floral shades and standards, designed with raised patterns in color. Quills stand in glass dishes that contain similarly colored glass shot.

seats that have hinged tops; cupboards and china closets; or sideboards with a series of drawers for the linen are all frequently constructed as part of the framework of a bungalow.

The draperies used in a home of this style are generally of a little coarser texture than in houses of the strictly Colonial, Elizabethan, or Italian,—although silk is always satisfactory. Cream colored scrim, velour in its lovely shades of yellow, green, or blue, monks cloth, pongee, cretonne, Japanese prints are attractive

for the living room of the house.

Rugs need not be Oriental to be effective. Crex, grass or rag rugs, if used to carry out the harmony of the room are excellent. The Japanese Jutt rugs, which are very inexpensive, always have delightful shades of blue and brown which blend with almost all furniture.

Dining room furnishings are much more interesting when simple. Some of the loveliest dining rooms are finished in blue with a dash of yellow. Blue chintz or velour curtains and blue rugs, to set off yellow walls are very effective if that particular color agrees with the living room colors.

Bedrooms are usually small, in bungalows, and require little furniture. Consequently they should not be needlessly filled up with a great number of distracting small ornaments as dozens of photographs, jarring banners and bric-a-brac. A bed, dressing table, two straight and one rocking chair, a writing desk are quite enough. A few good prints on the walls



The desk is ivory in color to match the woodwork.

and a flowering plant or vine in the window will add to the cosiness.

Planning the Music Room

E. I. Farrington



NO arguments are needed to prove the desirability of planning a music room when the designs for a new house are being made.

Such a room is very much worth while, even in an unpretentious home. It provides a spot where it is possible to place the instruments, whatever they may be, to the greatest advantage; and allows practicing to be carried on without disturbing the family. It may be a large and sumptuous apartment, containing a costly pipe organ, or merely an alcove

leading from the living room, but it is devoted exclusively to musical purposes.

It is desirable to have the music room on the least exposed side of the house and to have it well lighted. The lighting problem is more difficult when an upright piano is to be used than when the instrument is a grand, for the latter may be given almost any position, while the upright is usually placed against a wall. The light should preferably come from the left or from a little to the rear of the performer. At the same time, it is always

best to have the piano against an inside wall, where the atmospheric changes are less pronounced than against an outside wall. A piano is a very delicate instrument and is easily affected by wide variations in temperature. For that reason it should not stand immediately against a window.

Of course, there is really no reason why a piano should be placed against a wall, like a school boy in disgrace. As a matter of fact, some very interesting and tasteful arrangements may be made with the upright piano as a basis when the instrument is moved away from the wall. The back may be made beautiful with a strip of brocade or an India shawl, a high back settle may be placed against it or it may be hidden with an ornamental Japanese screen. And the tone of the piano, it may be said, is vastly improved when the piano is moved into the room. Even if the piano must be given the conventional location, it should stand two or three inches away from the wall, or better still, should be placed across a corner. Another matter to be considered in the music room is the position of the registers or the radiators. Too much heat, and especially dry heat, is

very detrimental to a piano, and the instrument should be kept at a considerable distance from the source of heat. Otherwise, there will be too great expansion of the strings, the glue will be softened and the sounding board may perhaps be cracked. If there is a fireplace in the room, it may be necessary to place a screen between it and the piano. All these little points may be considered when a special music room is being designed, where as in an ordinary living room there are many pieces of furniture to be placed and the position of the piano is likely to be arbitrarily fixed by conditions which cannot be changed.

Sometimes it is desirable to isolate the music room so far as possible, especially if there be a professional musician in the family who must use the instrument for hours at a time. This is a problem best solved by packing the walls with some of the various insulating materials on the market. The expense is but little and the effect is striking. Doubtless the most satisfactory music room of all is one which is built out from the rest of the house and is but one story high, making possible a large window in the ceiling. If stained glass



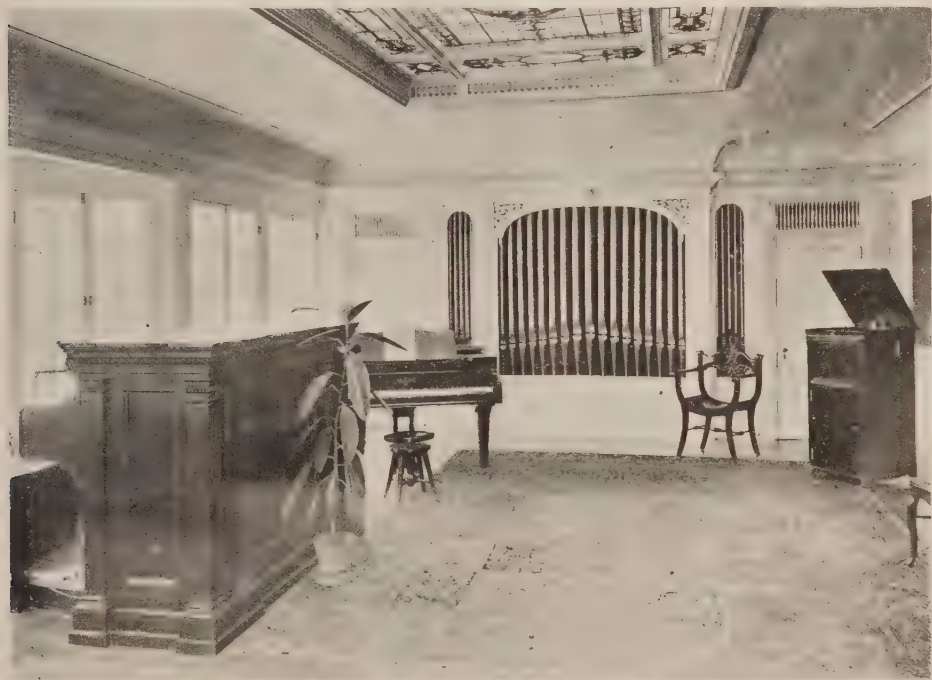
The music room in an elaborate house.

be used in this window, a very handsome effect is obtained. When double doors are used to connect a music room of this sort with the living room, the former may be practically thrown into the latter or entirely isolated as may be desired.

It is not unusual to build on a special music room when a pipe organ is to be

stands in a well lighted position in front of the window.

It is an interesting fact that the pipe organ designed for use in the home has come into wide popularity within the past few years. For a long time the pipe organ was suitable only for a church or large hall, but when the demand for organ music began to be appreciated by the



A successful music room added to an old house.

installed in a house already standing. A room secured in this way is shown in one of the illustrations. There is a large pipe organ in this room, as well as a grand piano. The many long windows on two sides make the room practically a solarium in the afternoon, and there is a stained glass window in the roof. Double glass doors connect the music room with the rest of the house and smaller doors lead to a porch. The organ itself is walled in at one end of the room, but the console

builders, they set to work to develop an instrument which should be adapted to the private residence and the result has been all and more than was to be expected. These home organs are essentially different from those made for churches. While carrying the same musical qualities, they have more delicate tones and possess an orchestral brilliancy not to be desired in public instruments. The pipe organ for the home is distinct in scaling, voicing and arrangement from



A reed organ may be built in place.

that built for a church. This point is emphasized because it is not always understood. The pipe organ for the home must be built for just the conditions it will meet in the home, where all sorts of music from ragtime to Bach's fugues will be played, and where the thunderous tones of the church organ would be quite out of place.

The home organ is commonly played by an electric-pneumatic action which requires less effort than the playing of a piano. Also, the console may be placed in any desirable position without regard to the organ. That means that difficulties of lighting are easily overcome and that the instrument may be installed where it would be impossible for the player to sit. Occasionally a small room is given up to the organ, which may completely fill it,

the pipes being exposed through the partition of the music room, where the console is located.

Many expedients are adopted to find a place for a pipe organ in houses already built. Sometimes the instrument is given a location on the second landing of the hall, with the console perhaps on the floor below. It is a simple plan to place the organ on the second floor directly over the music room, if a chamber can be given up for the purpose. Then the ceiling of the lower room may be torn away and an ornamental grill substituted, allowing free passage of the sound. It is not often that some way cannot be devised for getting a pipe organ into any house.

The pipe organ is much more common in American homes than most people suppose. It is not a luxury which the rich

alone may enjoy, for a very creditable instrument may be purchased for as low as \$1,200. The price, on the other hand, may run up to \$50,000, but in the latter case much of the money will be spent for decoration, elaboration and special features, including, perhaps, an echo organ. A large organ is pretty certain to have a full set of chimes or a harp, and possibly both.

Wonderful results may be obtained with such an instrument, for the light operas may be performed just as readily as the most impressive legato music.

Many, perhaps most, house organs now built are with an automatic playing device, by means of which the world's best music is at the command of a man or a woman who does not know one note from another. The registration may be governed by the performer and he may give his own interpretation to the music being performed while wholly lacking in organ technique. Sometimes the automatic player is enclosed in a desk or table, where it is out of sight when not in use.

The work of installing a home organ would be much more complicated if wind for the bellows had to be supplied in the

old way. Electricity is most commonly called upon to operate the blowing plant for the modern organ and a little motor with a fan blower is located in the basement, the attic or any other convenient spot, the wind being piped to the bellows. Water motors are sometimes used, but are less reliable. Gasoline engines are found satisfactory in the country where

electricity is not to be obtained. When a music room is being planned for a new house and is to include a pipe organ, this room should be twice as long as it is wide, while the height should be equal the width. It has been found that these proportions are the best for obtaining the most pleasing results from the average home organ.

Whatever the

proportions, however, it is very desirable to have the room at least ten feet high.

It is not at all difficult to have a music room in which a consistent decorative scheme is carried out. Organ makers in particular are thoroughly familiar with architectural and decorative possibilities. Their instruments are made to fit in with any scheme which may be desired, this result being the more readily accom-



There is too much bric-a-brac.



A pipe organ may be made to fit into any scheme.

plished because of the fact that the pipe organ for home use is generally made to order.

The well ordered music room is very simply furnished and preferably should have a hardwood floor. The number of heavy draperies and rugs should be reduced to a minimum, for they tend to absorb the vibrations and therefore interfere with the tone qualities of the instru-

ments being played. It is well to use but few pictures and fewer ornaments, if the music room is to approach the ideal. And above all, the piano must not be littered with books, music and bric-a-bac. This is done in the best of homes, but the sight is a painful one to the real music lover, for he knows that no piano can be heard at its best when used as a repository for ornamental odds and ends.

*"When the heat like a mist veil floats,
And poppies flame in the rye,
And the silver note in the streamlet's throat
Has softened almost to a sigh
It is July."*

—Susan Hartley Sweet.

Rustic Fences and Gates

M. Roberts Conover

WHERE the home plot allows room enough for vines and shrubs, rustic fences and gates blend too well with trees, vines and shrubs, to be ignored as enclosures. A rustic fence is very pleasing about a garden and even where one does not use a wooden fence a rustic wooden gate may look extremely well with a vine-covered stone wall or a hedge as an enclosure.

Of course one often sees mistakes in the use of rustic gates. If such a gate is used where there is no enclosure or is combined with a classic balustrade, it becomes meaningless or ridiculous, as the case may be. Then, too, there are fences and gates of rustic finish that are rickety and unstable in appearance, but such mistakes should not prejudice one against

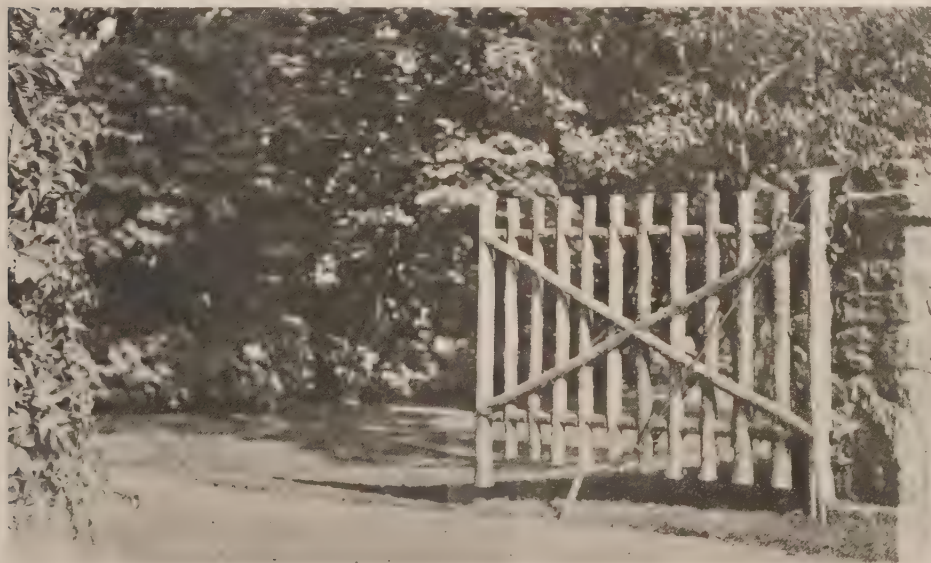
the appropriate use of the rustic gate or fence.

While rustic fencing has not the permanency of stone or iron, yet good work will last for several years. An experienced woodworker says that when sound red cedar is used and the wood securely joined, rustic fencing lasts from ten to fifteen years.

The adherence of the bark depends upon the choice of the wood. No treatment will help to keep the bark on.

Either the wood of evergreen or of deciduous trees may be used.

Evergreen wood should be cut in August and used green. The wood of deciduous trees is cut in December and January and seasoned before using. Red cedar is the best for fences. Sassafras



(1) A satisfactory design for a rustic gate.



(3) This gate may be vine covered.

ranks next and chestnut third. Laurel is fine for rustic work that is to be varnished.

The best method of joining the parts is to use wire nails that are long enough to reach the heart of the stick and will last as long as the wood. Bolts are used

for fastening together the parts of gates.

Illustration One is a simple, satisfactory design for a rustic gate. Structurally it is pleasing. There are no weak lines.

Illustration Two shows an entrance gate which is interesting because it is well adapted to the foliage setting. This



(2) Rustic gate adapted to the foliage.

is used as an entrance to a drive leading to a garage.

Illustration Three is a style of gate which gives good support to vines. The Wichuriana or Memorial rose and the Rambler roses look well on such a gate.

Illustration Four is a rustic fence structurally durable because of the stout posts, and the poles at top and bottom and because the other parts are, wherever possible, left as they grew with as few artificial joints as possible.



(4) Durable—with stout posts.

The Man with Five Friends

John Muir, the well loved naturalist, who died recently in Los Angeles, had many friends. During his seventy-six useful "well enjoyed years" of life, from the time of his daily school boy fights in Scotland to his latest scientific triumphs, he achieved many triumphs. One of the most noteworthy, yet perhaps the least known, concerns his five friends.

Although John Muir's home was in the Contra Costa Valley of California, where he could have fellowship with the giant trees that he loved so well, there were five homes in the United States that maintained each a "John Muir room." These homes were the residences of the naturalist's friends, and the rooms were never used

save when he came to be an honored and delightful guest.

The man having one friend at whose door he can knock with the certainty that there is a place made warm for him is fortunate above most men. The man who has five such friends is blessed. There are not many of the things called evil that can successfully attack him, for he has five fortresses to which he may retire. When he goes forth from one of these, he goes armored with love and faith, and his wounds will be slight. But to win and hold so much blessedness a man must be, in himself, an everlasting source of love and faith and friendship. John Muir was such a man.

Making the Most of a Narrow Lot

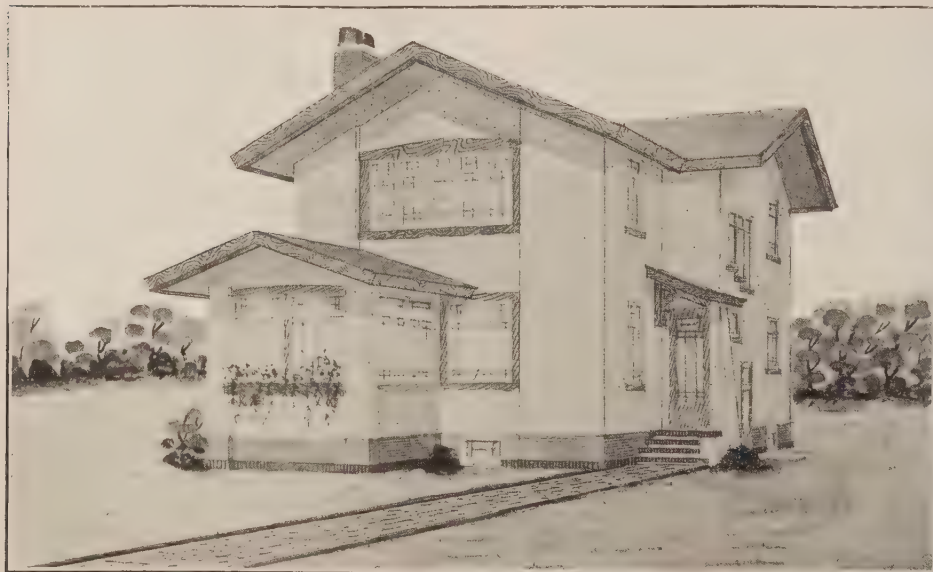
A GREAT many people are required to build their homes on narrow plots of ground and to show what an attractive house one can have, even under these restrictions, the accompanying design has been prepared for an inexpensive cement cottage.

In this design we have an unusually simple treatment of details, the construction of which is very attractive. The exterior walls are of frame, covered with galvanized iron lath and rough cast cement plaster. The walls on each corner of the front are increased four inches in thickness by furring out in order to get the pier-like effect supporting an extra wide projecting cornice. This gives a very substantial appearance as well as enabling the working in of an attractive group of casement windows on the second floor. The soffit of the cornice has been plastered the same as the walls. A

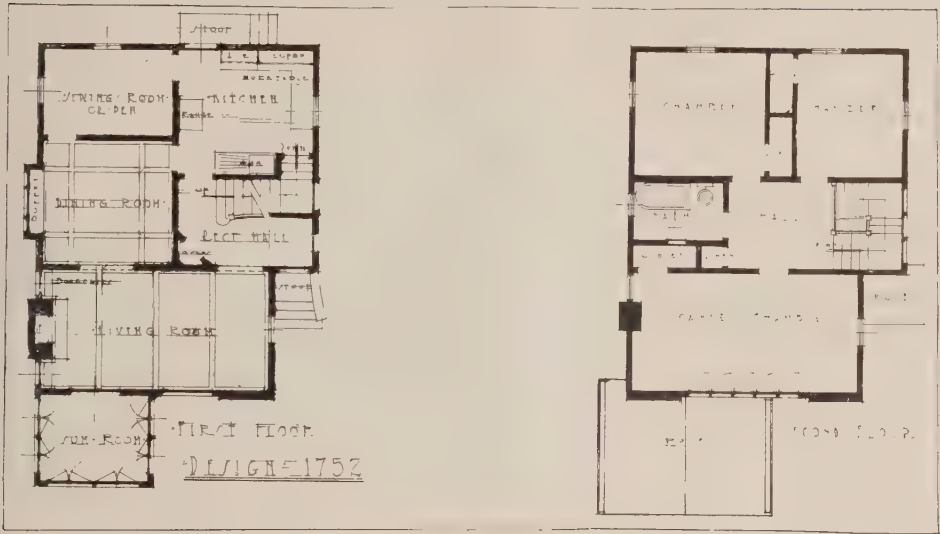
rough sawed board is nailed to the ends of the rafters or lookouts, these forming the simple cornice. All exterior mill work is of fir, the same being stained to bring out the grain.

With the sun room extended on the front, the plan is one that can be built on the average city lot and not be cramped for room. The treatment of the entrance at the side with a simple hood supported by a heavy bracket is unique in detail. This entrance has brick steps which, together with the brick walk and foundation above grade give a touch of color to the exterior. The base should be planted with hardy shrubs.

The floor plan is rather unusual, entrance being into reception hall, from which a wide cased opening leads into living room. Here is a good sized room with brick fireplace in one end, flanked with built-in bookcases and high casement



It gives breathing space, even on a narrow city lot.



windows above. The same simple cased opening separates living and dining rooms. This latter room has a built-in "buffet" which is very attractive. To the rear of the dining room is a small room which can be converted into a sewing room or den. There is no pantry; the kitchen being large enough to provide for plenty of cupboard room. Note the recess for a sink, the location of the range, the convenience of the refrigerator and last but not least, the arrangement of the stairs to second floor or down to basement.

On the second floor there are three well arranged chambers, with ample

closet space, large bath and linen closet, all opening off a square central hall. The triple stair windows make the double landing very pleasing. There is no attic; the basement providing plenty of storage space besides good laundry and fruit and vegetable room.

The floors throughout are of maple with tile in the bath; kitchen in pine for linoleum. First floor finish is cypress or fir and second floor finish is pine for white enamel. Birch doors are stained mahogany. The probable cost of this cottage, including heating, is estimated at \$3,750.00.

The Lay-Out of the Grounds

Perl Brothers, Landscape Architects

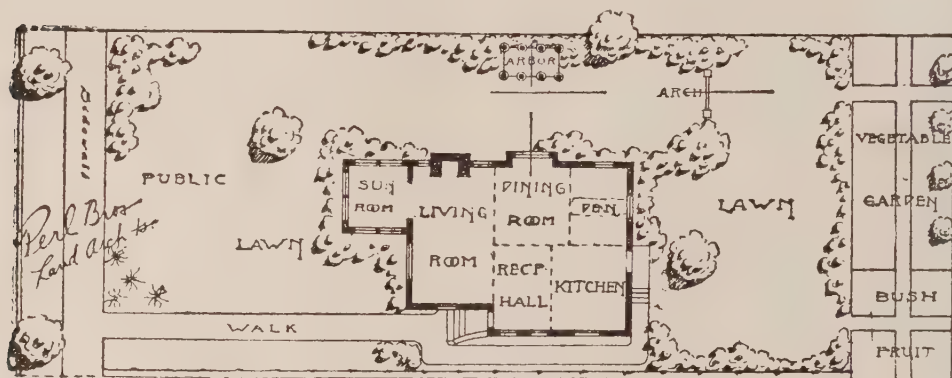
It is usually the decree of the real estate man, for economical reasons, that the ordinary residence property shall be forty feet in width, seldom fifty, and rarely sixty. Such a width is room enough for the house itself, and a narrow lawn at the

side. It is quite essential, therefore, that the available space for landscape treatment be used to the best advantage.

In the development of the fifty feet of property for the stucco house just illustrated, a broad open lawn increases the

scale of the residence both in size and pretention, and with shrubbery and evergreens placed at strategic points, a proper setting is the result. A small arbor creates an interesting vista from the sun

at two points paths lead into the vegetable garden, a portion of which has been reserved for bush fruits, such as raspberries, currants, etc. Four dwarf fruit trees are placed near the rear property line. A



parlor, living room and dining room. A vine-covered archway leads to a small private lawn, made interesting by the use of annuals and perennials with shrubbery as a background. Through the shrubbery

collapsible clothes reel may be used to afford convenient drying space. The arrangement affords an interesting, artistic as well as useful solution for a fifty-foot piece of property.

A Modern English Cottage with a Thatched Roof

MANY of the readers will wonder at the caption, "Modern English Cottage," for the word modern in this sense covers a multitude of sins. Twenty-five years ago a house was considered modern if it had a bath and kitchen sink. Then came the heating plant to replace the stove; after this, the laundry, with stationary tubs, and five or six years ago the sleeping porch had to be added. Indeed the styles of houses are ever changing, just as the styles of clothes. This is especially true of the interior plan and arrangement.

At the present day, what must we find or have in a house in order to call it mod-

ern? True, the up-to-date plumbing combined with the heating plant will not make the house modern, although these are essential. We must have the sleeping porch. The sun room reached from the living room through French doors all fitted with casement sash, replacing the ordinary front porch. The breakfast room, similarly located off the dining room, easily accessible to the kitchen, where the morning meal and oftentimes the noonday luncheon is served. There must be a fireplace, built-in bookcases, window seats, ample built-in kitchen cupboards, especially if no pantry, entry for refrigerator, plenty of closets, to include linen cup-



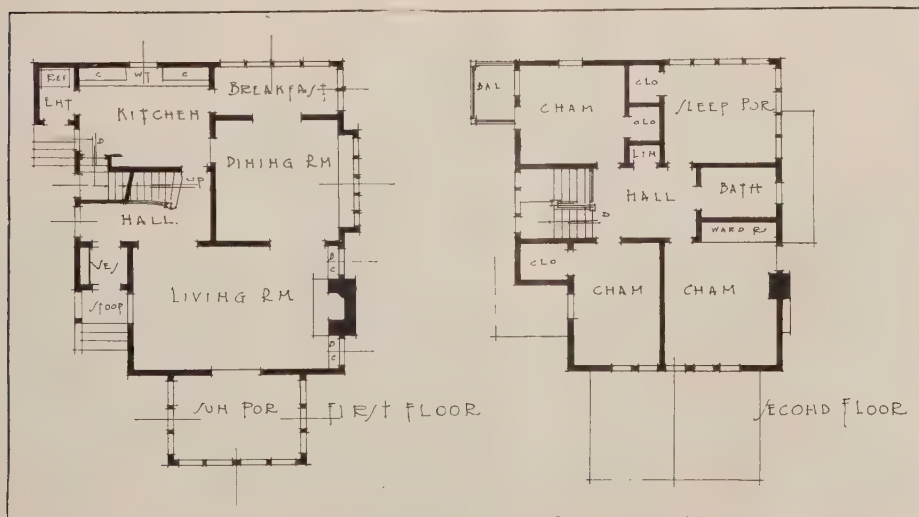
The exterior walls are brick with cement plaster and half timbers above.—W. W. Purdy, architect.

board and wardrobe, and last but not least, the clothes chute.

A study of the accompanying plan will reveal all of the above and many other attractive little features not shown in the small reproduction.

The above place is ideal for the average city lot. The entrance is at the side, into a good-sized vestibule with built-in wardrobe and a seat in the bottom for storing

rubbers. From the entrance hall one passes into the large living room across the front finished in quarter-sawed white oak fumed. Adjoining the living room is a fair-sized dining room finished in ash a silver gray. The breakfast porch and sun room are in pine, natural. On the second floor are three good chambers, bath and sleeping rooms, all in white enamel.



The floors on the first floor are white oak with linoleum on kitchen and maple on the second floor, with tile for bath and vestibule.

The basement is most complete, with heating plant, storage and laundry.

A golden mottled brick has been used on the walls up to the first story sill, and

above a cement plaster stained a light cream with half timber work in the gable. All exterior millwork is fir stained brown, and the thatched roof a deep red.

Note the little balcony over the rear entry providing a place for airing bedding.

Under a Low Roof

HERE is a plan which surprises and quite pleases the fancy in the number of attractive features which it embodies in an unobtrusive way. The entrance from the long veranda is centered in the usual way. At the left of the entrance is the living room, well proportioned in its lines, but with the interest focused in the inglenook with fireplace, and seats which make one wish for a cool, rainy day, a book or a boon companion. A columned opening connects with the dining room.

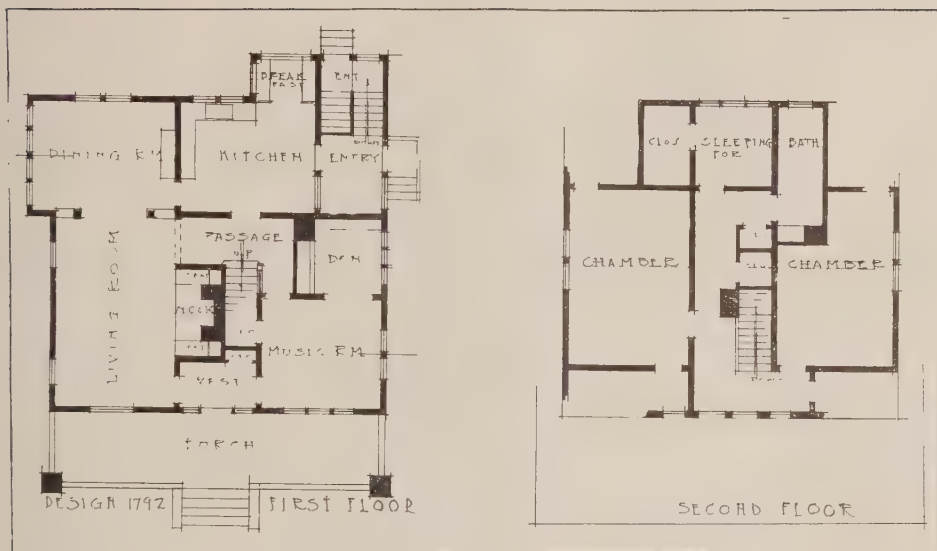
The arrangement of the stairs is unusual and very good, making them convenient yet retired.

The kitchen communicates easily with the stairs and other rooms. The breakfast alcove has been especially well worked out. Here between two built-in seats is room for a small table on which the breakfast may be placed before it is rolled into place. With windows opened, the alcove becomes an open porch. The kitchen has ample space for built-in cupboards. The entry gives place for the refrigerator which the iceman can fill without troubling the housewife, and also gives access to the basement, the stairs having an outside entrance at the ground level.

The space under the main stairs is util-



The graceful lines of the roof extend out over the front porch.



ized to advantage by the coat closet opening from the vestibule and a closet from the music room.

The inclusion of a music room in the plan and the arrangement of the den add other features not usually found in the small house plan.

On the second floor a large chamber is finished off in each of the side gables, with a sleeping porch and bath at the

rear under a large dormer. These with the large closets under the roof and a linen and hanging closet complete the conveniences of the second floor.

The graceful lines of the roof extending out over the front porch make a very pleasing little cottage home of the semi-bungalow type with cement walls for the first story and shingles in the gables.

A Picturesque Stucco Cottage

THE size of this cottage is 28 feet in width by 28 feet in depth, comprising three rooms on the first floor and three on the second. It is suitable for an east and south front. It is built frame construction and the outside walls are veneered with a dark oriental brick up to the sill course, and above this the walls are finished in cement stucco. The roof shingles are stained and all of the trimmings, cornices, virge boards, casings, etc.,

stained dark brown, giving a very pretty and artistic effect. The architect estimates the cost exclusive of heating and plumbing, at from \$3,200 to \$3,600.

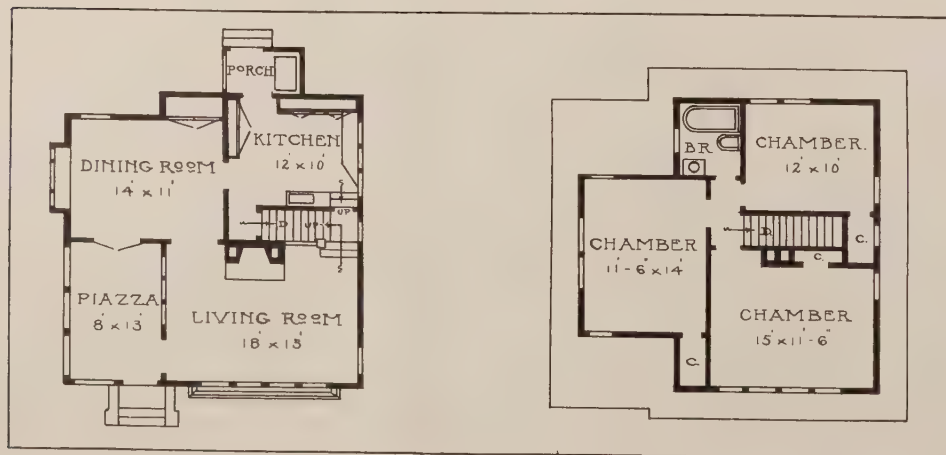
The entrance is from a glazed piazza on the southeast corner and coming under the main roof, the main living room and dining room both opening on this piazza with glazed doors. The main stairs lead up between the living room and the dining room with combination arrangement. The first story is finished in oak



Many windows gives out-of-door living.—Chas. S. Sedgwick, Architect.

and the second story in white enamel. There are three good chambers and ample closets on the second floor, with bathroom; and good storage space in the attic which may be reached by stairs carried up over the main stairs.

The basement is full under the house, with ample space for heating apparatus, laundry, etc. The chimney is centrally located, with wide open fireplace in the living room.





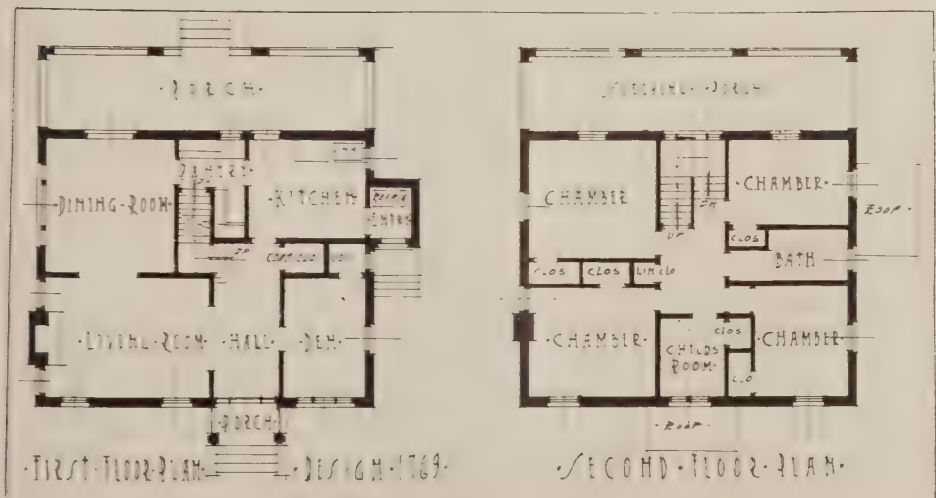
The whole house is simple and substantial.

A Roomy House

WE here illustrate another full two-story house of the colonial type, veneered with brick. The entrance is from a portico into a small hall with living room on one side and den on the other. The stairs are well

placed, allowing an excellent communication between the kitchen, the stairs and the front door; a most necessary feature where the maid is expected to attend the door.

The dining room opens off the living



room and communicates with the screened porch at the rear, by French doors. The kitchen also opens on this porch, giving it convenient service as a dining porch.

On the second floor are four chambers, child's room and bath, with good closets in all rooms, and a long sleeping porch. There is good attic space even for old fashioned requirements, where heirlooms

may accumulate.

The finish of the house is simple and may have inexpensive treatment, with hardwood floors throughout.

There is a full basement under the whole house, including the rear porch, so that the porch may be made a living part of the house in winter as well as summer. With hot water heat it can easily be made comfortable even in severe weather.

Homes of Individuality

Selected by W. J. Keith, Architect



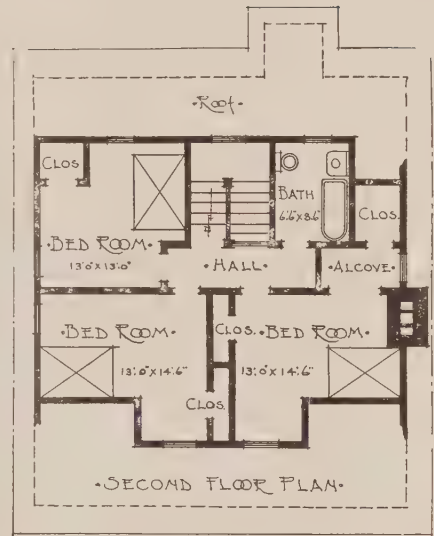
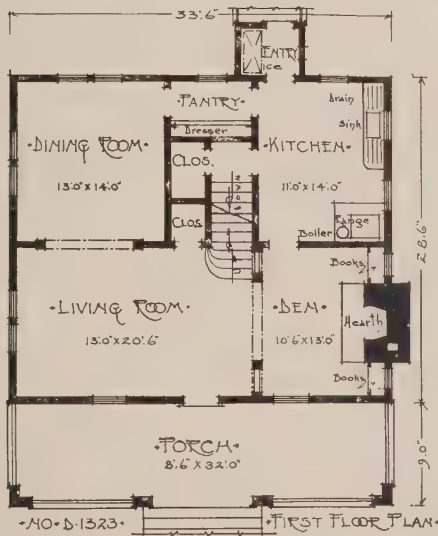
Shingle walls give a soft color effect.

A Good Summer Cottage

HERE is shown an attractive example of simplicity and good proportion. The walls and gable ends as well as roof and dormers are all covered with shingles. The floor plan is given below.

A living room and den separated by a post and panel treatment occupy the front of the house. The den is furnished with

a stone fireplace and bookcases built in on either side. At the rear of the living room is a pleasant dining room. This connects with the kitchen through a pantry. The cellar stairs open from the kitchen, where is also located a large closet for storage purposes. The kitchen range connects with fireplace chimney by way of a flue passing through an enclosed portion at the top of the near bookcase. The cor-



responding section in the case on the opposite side of the fireplace is arranged as a cupboard for magazines. Service way is had from the kitchen into the den through a door at the side. A closet is built in at the left of the stairs for coats and wraps.

On the second floor are three bedrooms

and bath. Closets are arranged for each room. A full basement is provided under the entire house.

A Tiny Bungalow

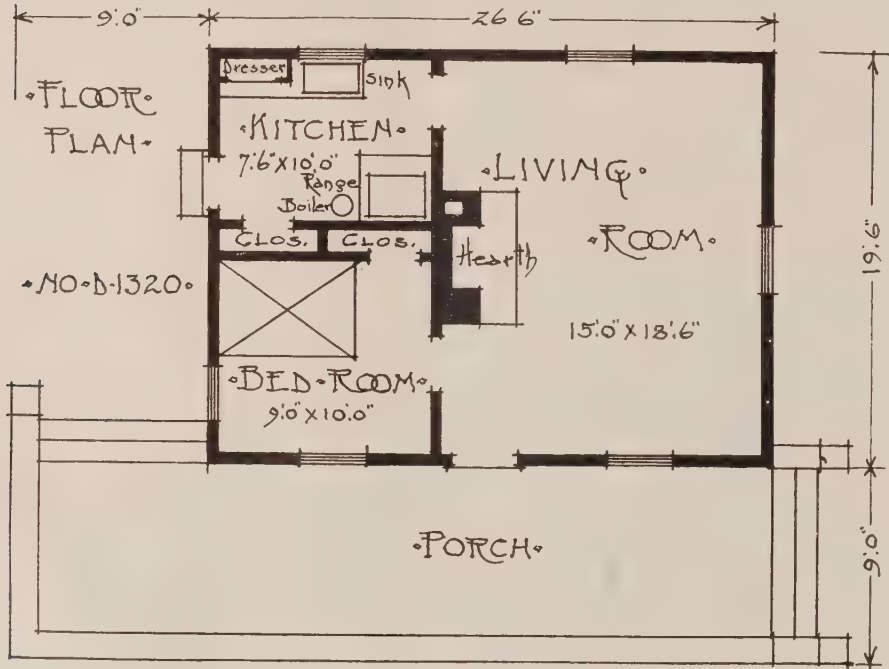
A tiny house always has a particular attraction to people who practice or believe in the "simple life." Here is a plan in which the elements of



Field stones builds it into the hillside.

comfort have been reduced to their simplest form. This bungalow was built on a hillside and native stone has been used for the terrace wall enclosing the porch, giving an effective approach. The inside is attractive and livable, though very compact; a large living room with win-

dows on three sides and a wide fireplace; a sleeping room with a closet; and a kitchen with sink, cupboard and a closet. The fireplace carries also the flue from the kitchen range. With its hospitable porch it gives the essentials of living.



A Snug Little Bungalow Home

THE bungalow style of architecture is so comparatively modern that to call one "old fashioned" would seem a strange expression, still the exterior of this house, suggestive of the New England cottages, is surely old fashioned, although its inside arrangement is as convenient and cozy as any of the newer bungalows, and includes many of the built-in features which are such a help to easy home-making, even

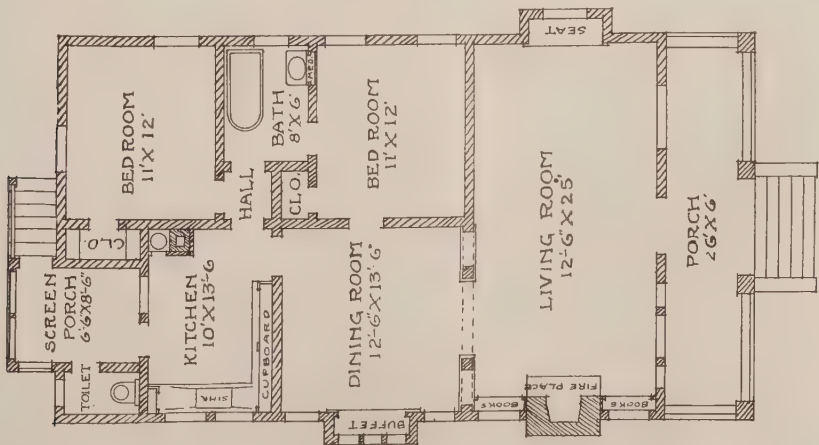
to a dust chute, which does away with all back-breaking over a dust pan. The house was designed for a narrow lot, being only 26 feet wide. The rooms are large and well arranged for easy housekeeping; there is a wide open fireplace in the living room and a cozy window seat. A colonnade opening with built-in bookcases in the buttresses on either side leads into the dining room, which has a built-in buffet. A complete



It is comfortable in Florida, Oregon and Michigan.—Bungalowcraft Co., Architects.

cabinet kitchen, good closets, handy bathroom and a screened porch make a home which has been built, it is stated, for \$1,350 in Florida, \$1,500 in Oregon, and with cellar and furnace in Michigan for \$1,900. The kitchen chimney is so placed that when required a stove may be used in

the rear bedroom. The interior is finished with hardwall plaster, tinted. The woodwork trim is of pine stained and varnished in all rooms except the kitchen, where it is painted. The picture shows the exterior so clearly that no description is necessary.





With good lines, it fits into the landscape.

A Substantial House

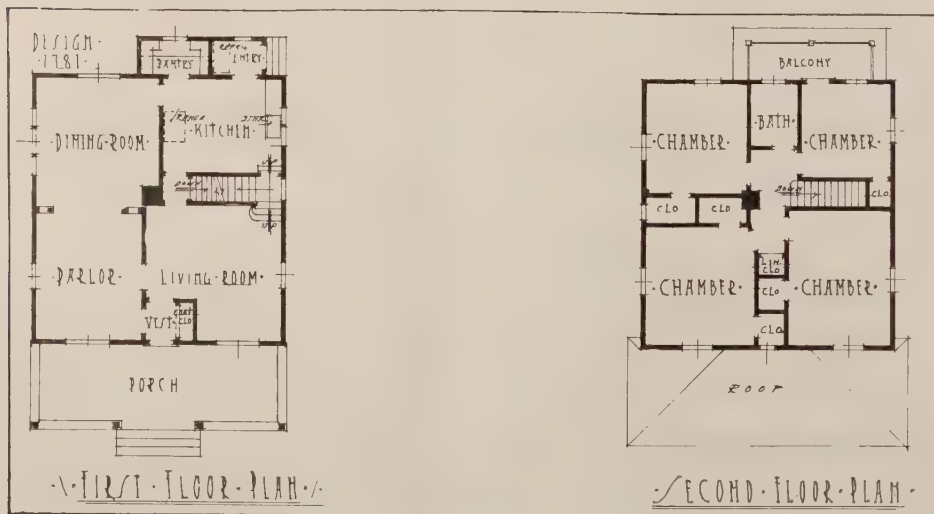
IN this design we have the simple hip roof treatment with a construction of cement, plaster and shingles for the exterior walls.

The interior as well as exterior are so arranged as to give the most room for the least cost. With four rooms on the first floor, four chambers and a bath on the second, there is no waste space.

The windows come up under the eaves

leaving a good air space under the roof, with windows or louvres in roof for ventilation. The balcony on the second floor, opening from a rear chamber, gives good opportunity for sunning bedding.

The interior woodwork may be either pine or fir, with brick or maple floors. It may be simply finished, yet be substantial and satisfactory. The house is planned to be heated by hot air



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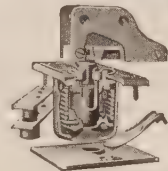
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Wall Paper Suggestions.



THE variety of wall papers is almost infinite, and at every turn one is apt to come across something which seems absolutely new and absolutely lovely. The question as to its use is usually one of adaptation. Nothing so makes a room as the right wall paper, nothing so kills it as the wrong one.

Certain things in the way of papers are almost always safe. It is difficult to go astray with a small pattern in two low tones of a color, soft green, gray blue, medium olive, or golden brown. Another wall which is almost always at its best is one covered with a verdure tapestry in low tones of olive, blue and russet. And, to realize how satisfying a paper with a handsome pattern in tones of grayish tan can be, you should see the same color in brocade with white woodwork. Of course, papers no more positive in character than those I have mentioned must be used with due regard to the contents of the room. Red velvet curtains would be quite unhappy in association with the tapestry paper, nor would you care for the combination of gray blue walls with turquoise furniture coverings, or purple silk cushions. But within their limitations almost any one can have an effective room with one of the papers I have mentioned.

There is another type of paper, which, for lack of a better name, I will call the picture paper. The landscape papers which were the pride of some of our great colonial houses belong to this class; so do the gorgeous or delicate groupings of birds and foliage upon black or white ground, made from designs by distinguished artists, and, but for the brush-

work, having all the charm and pictorial quality of a fine watercolor. Others, not less interesting, copy closely Jacobean crewel work or Georgian damasks. At first blush such papers seem utterly impossible for the average house, admirable decorations for shop windows but quite impracticable.

William Morris held that it was perfectly proper to use a large patterned paper on a small room, and certainly the repeats of all his best papers and tapestries are a long way apart, although they are so well managed that one is not conscious of the structure of the design or of its size. But Morris' walls were no back-grounds, they were decorations, as much as a mural painting. So if you want to use such papers you can use them as he used his large patterned papers and textiles, and consider your wall complete when the paper is laid, not attempting to hang pictures or to have any other sort of ornament. And, as we are so accustomed to the use of pictures that we should probably feel quite unhappy in rooms without any, you are well advised in choosing for experiment the one room in which you do not live, but through which you pass constantly, the hall.

The use of such a paper solves the problem of the insignificant hall, so common in our American houses, built on lots of limited frontage. The wall space is usually small so that the outlay for a really fine paper will be slight. Select for your narrow and poorly lighted hall a bird and tree pattern of light and bright coloring on a white ground. If the hall has a northern exposure choose a paper with warm tones of color, yellow greens, yellowish pinks and reds, the sort of paper whose birds are macaws or parakeets,

or parrots. Then have the woodwork either white or a soft olive, the carpet a plain one in olive of the tone of the foliage. Except a possible mirror, nothing is needed but the indispensable furniture, a table and a chair, with hooks under the staircase for hats and coats.

For the sunny hall, on the other hand, a good choice is the peacock paper, which is easily found, and has besides the beautiful iridescent blues and greens of the birds, foliage in cool tones of green, which will contrast agreeably with a plain blue carpet for floor and stairs. While the first treatment suggested looks extremely well with dark oak furniture, whose tone might be extended to the woodwork, the second is equally good with mahogany for chair, table and stair rail.

There are some other large patterned papers, which copy Georgian damasks, the design worked out in soft blue or dark rose on a biscuit ground, or vice versa, the texture of the fabric being cleverly reproduced. A paper of this sort is well bestowed above a dark oak wainscot in a hall, or if it is carried down to the surbase it makes an effective background for dark oak furniture, especially the rose colored paper. The papers which copy crewel embroidery are specially good for halls with Jacobean furniture in dark oak. It is sometimes possible to find the same pattern in paper and in printed linen, and if this can be done the linen can be used to good effect for loose cushions for chairs and a settle. But it may be well to say that most of the Jacobean furniture is not adapted to small apartments.

Harmonizing the Other Rooms.

It may seem as if the use of a paper with so much pattern were inconsistent with the single color scheme which is so much the best for the small house. While it is possible that the rooms may lose slightly in apparent size, the introduction of a contrasting scheme relieves what is often felt to be the monotony of a floor in a single neutral color. The hall can be considered the high light of the scheme, the other rooms being carried out in the lower tones of the "picture paper." For instance, the rose red and biscuit paper would be effective in a house whose other rooms were in tones of grayish brown. The same sort of a paper in blue with a warm brown for the woodwork would



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be good with a general golden brown scheme. As for the bird and foliage papers, the warmer sort of coloring would answer admirably in a general green treatment, while the peacock pattern could be used with living rooms decorated and furnished in blue. It is obvious that the difficulty of harmonizing the various rooms with a highly decorative treatment of the hall does not exist in a house of the strictly colonial type, in which each room is to a certain extent isolated, independent of the others, and seen from outside only through a narrow opening.

The same principle applies to the use of these decorative papers in bedrooms, whose doors are presumably kept shut. There is a great deal to be said for the pictorial treatment of bedroom walls. In the average house there are not enough good pictures to go round, and the rubbishy ones are kept for the bedrooms. Far better sell them, or put them away, and have cheerfully flowered and unbroken walls, against which your furniture will be pleasantly relieved, and upon which your eyes will rest with satisfaction as it is lighted by the early sunshine. The papers which I have mentioned as copying old crewel work are particularly happy in rooms with Jacobean furniture. The curtains and furnishings should be of plain color.

Jacobean Styles in Furniture.

It is only two or three years since our manufacturers began to copy the Jacobean styles of furniture, and their first pieces were of the most pretentious order, fitted rather for the hall of a castle than for simple American houses. Now it is possible to get a great variety of pieces of manageable size and fairly moderate price. Such furniture is a capital investment, as it is excellent in design and construction and really beautiful in color.

What may be considered the typical piece is the gate-legged table. The large size being an admirable dining table for a small family, while the smaller ones are useful in many ways, especially those with a drop leaf. To go with the tables are dining chairs with square seats and backs, which are most effectively upholstered in dull red with a heavy wool damask, far more serviceable and picturesque than the usual leather. Other chairs have panels of cane, still others rush seats. Quite the

prettiest wooden bedsteads to be had are Jacobean, with twisted posts, head and footboard of nearly equal height, and inserted panels of cane.

All sorts of small articles are made along Jacobean lines although not copies of old pieces, among them small desks and nested tables, fender stools and jardinières. All the Jacobean furniture looks particularly well in association with large patterned cretonnes or printed linens, or with the verdure tapestries. For a bedroom a dull blue wall, strongly patterned blue and cream printed linen and Jacobean, cane paneled furniture is a very happy combination.

The Office of Lamp Shades.

Too often the whole effect of a room is spoiled when it is seen by artificial light, and electricity sins greatly in this respect. Very gradually we are learning to appreciate the value of side lighting with here and there a stationary lamp on table or desk.

Instead of buying expensive glass shades for these last use paper of fabric shades harmonizing with the furnishings. Have you a cretonne covered davenport loaded with cushions? Duplicate the material for big shades for your lamps. If the effect of the material with the light shining through it is not good try a lining of thin silk, white, rose or yellow, or else cover the frame, beneath the cretonne, with heavy white net.

When pottery or porcelain jars are used for lamps the shade should be of silk, repeating same color of the design. If the vase is pottery an opaque shade covered with Japanese grass cloth of the same color is effective. Or the geisha shades of paper and bamboo can be used. These are especially good in orange tones and nothing looks better with light colored Chinese or Japanese porcelain vases than a white geisha shade.

There is no greater mistake than to have a jumble of different colored shades. If you have half a dozen in a room, let them be of varying tones of a single color with possibly a single one of a neutral tone. If you have several shades covered with the same figured material, chintz or silk, vary the shapes and the depth of tone of the linings. Any good needlewoman can make such a shade over a wire frame at a very small cost.



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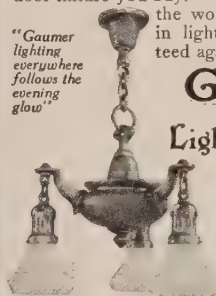
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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

EDITOR'S NOTE.—The courtesies of our Correspondence Department are extended to all readers of KEITH'S MAGAZINE. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

A Query from Massachusetts With Old Furniture As a Key.

Mrs. W. G. W.—“I am about to build a home on Colonial lines, facing the east. All interior wood finish in cypress and floors hard pine. Living room will be 15x22 running from east to west along south side; hall central; dining room east and north windows. On the second floor there are three bedrooms, bath and sitting room, on the southeast corner.

“I am in despair about my old furniture, and cannot have new at present except the most necessary. Can you please help me?

“I have the contents of two small living rooms at present. Old square rosewood piano, two mahogany and tapestry rockers, a straight birch chair, and a brown Bar Harbor wicker with tapestry cushions, and a mahogany Victrola. Rug 9x12 is Hartford saxony in pastel tints, cream, tan, faded rose and some yellow. I have also a large leather davenport in Early English, writing table and two rockers to watch. One green and tan Axminster rug 9x12 (used with the Early English furniture).

“My dining room has tan and green tapestry rug 9x12, old sideboard that I intend having made into buffet, square table and chairs all in light oak.

“I wanted my living room floor and woodwork in the new driftwood color and finish, walls a gray green, with border in wild rose, or some pale rose stencilling. Dining room walls above chair rail in buff or warm tan, below in sage green and woodwork in one of the brown tones.

“What shall I do with dining room furniture, and would some rose be better in this northeast room? I consider using only alabastine tinted walls all over the house, except bathroom, kitchen and pantry, which will have painted walls.

“Is it possible to have the driftwood finish in living room with this mixed furniture, or what shall I do with it? What can I do with hopelessly ugly bedroom furniture, neither ancient nor modern, but of the clumsy period of 30 years ago, including a black walnut set with marble top?

“I am sending for Keith's Volume 9 on Interior Decoration; perhaps it will answer some of my questions. But I would like you to tell me about painting over some of this old furniture, if it is not hopeless.”

Ans.—We have given your problems our best attention. No, you cannot carry out your dream of driftwood finish and wild roses in living room. Neither walls nor the light pastel coloring of the Saxony rug would be at all in tune with the mixed furniture you describe. But it would be possible to use these ideas in the dining room and have it very charming. Do the woodwork in the driftwood, grey stain; have the plaster wall below the chair rail a rough finish and tint it a dark dull rose. Finish the wall above to moulding at top of doors and windows, hard putty coat plaster and use a wall paper here in an all over tapestry design of dull pink roses and greyish green foliage. We have seen exactly the thing, also a cretonne in similar coloring, half a width on each side over white, to use at windows. The Saxony rug must be used with this scheme, though it is rather light for a dining room. We would like it dyed the deep dull rose of the plaster dado. Now then remove the varnish from your light oak dining set and stain it a little darker grey than the driftwood woodwork. Tint the ceiling ivory white.

The woodwork of hall and living room should be the same and we advise a brown stain. Tint the walls a soft ecru, not tan,

nor grey, but between the two. Use the green and tan Axminster rug here and supplement with a couple of long narrow ones, one each side in plain green. One width of plain Wilton or Axminster carpet finished like a rug at the ends, each three yards long, would be a good and inexpensive way of doing this. Then use plain green as much as possible on the furniture putting the mahogany pieces at one end of the room and the davenport in front of the fireplace.

The black walnut bedroom furniture is not hopeless if you take off the marble tops and replace with glass cut to fit, over gay cretonne. Use the same cretonne freely in furnishings but not on the bed, and tint the walls a soft putty grey with one of the sand color rugs, white ceiling and white woodwork. Give the golden oak furniture a setting of tans and soft leaf browns. Use the blue rug with the white bed and tint the wall a soft old blue.

Color Scheme for Living and Dining Rooms.

L. L. W.—“Enclosed is the first floor plan of our new house. Will you kindly suggest a color scheme for the hall, dining room and living room? The floors are oak. Shall they be waxed or varnished?”

“The woodwork is to be white enamel. How shall I finish the walls? What kind of curtains, portieres, rugs and furniture shall I get?”

Ans.—Although your living room has only direct lighting from the bay window on the north, it receives so much indirect light through wide openings on all sides, that we may venture to use a warm putty, grey wall. There is a paper with the effect of grass cloth in shades of grey lighted up with a thread of gold, that would be beautiful with the white woodwork and white ceiling.

There is a tapestry paper in grey with broad figured stripe in mulberry coloring that would be fine in the hall. With these walls we would use mulberry hangings and grey and mulberry rug in living room. Soft deep rose tones in oriental rug in hall.

Furniture of living room, wicker, stained grey and upholstered in mulberry velvet, except library table and desk in grey oak or ash.

Dining room wall plain grey dado, foliage paper above in dull greens and blues. Blue rug, blue curtains, furniture Kaizer grey oak, chair seats upholstered in blue leather. Ceiling pale grey. We should prefer floors waxed. Walls should be hard finished for paper, sand finished for tints. All ceilings should be tinted.

Furnishing a New Bungalow.

Mrs. C. L. E.—“As a constant reader and former subscriber to ‘Keith’s’ I now turn to you for advice as we are building a bungalow. I am enclosing rough sketch of same. The small front bedroom is for our small children and I want that in grey and pink. Grey enamel chest of drawers and grey iron bed, cretonne in bright pink flowers on grey ground and pink walls. Will that be correct? We are refinishing the chest of drawers ourselves. Should we get other pieces for this room besides chairs and perhaps a small table?”

“Then my kitchen and bath I should like in blue. Bath has south window and kitchen will get plenty of sunlight through breakfast nook I think, which is almost all windows.

“Furniture for other bedroom and living room is fumed oak of good make. Brass bed, chiffonier, and dressing table for bedroom. Piano (also in fumed), and three rockers for living room.

“I think I prefer round dining table for living room but my husband thinks a very large library table better. We must have one that would answer purpose of dining also.

“I do not care for neutral tans or even golden browns with fumed oak, and have wanted to have living and dining room in the blues and greens you so often advise, but know that is out of the question with the northwest facing.

“I am so anxious to have everything in good taste even though it is such a little place, and I want things to have an individuality even to minute details.

“Can one purchase craftsman canvas or linen wide enough for bed spreads?”

Ans.—The combination living and dining room appears to be your chief problem. In the March, 1915, issue of Keith’s, on pages 188-190, many suggestions are given for such a room which we are sure will be of value to you. We think your idea of the round table is best as it would

be almost impossible to use a library table for eating. The round table need not be a regulation dining table; it could be a drop leaf table and be very pretty with a mat, flowers and books when not in use. One of the circular wicker tables stained brown, would be pretty there and a wicker couch to match along the group of windows. The wicker table should have a glass top over cretonne and the couch be cushioned with cretonne. When you wanted to seat a number of people you could have one of the circular pine wood table tops that cost \$2.50, to set right over the wicker top, any size you please.

Your ideas about the children's room are all right, and very pretty. The small table and low chairs will be sufficient additional furniture. If you want a blue and white kitchen, a good way is to have a 4-foot dado of the wall, marked off like tile in hard plaster, then paint it in oil paint a dull Delft blue. Above this paint the wall and ceiling cream white.

Craftsman crash or linen comes about 50" wide. Why not use heavy half-bleached sheeting, double width? There

are so many windows in your living room that the blue and green combination might be managed. We have seen a blue and green Saxony rug with lines of old gold through it. You do not say, however, how you plan the walls. It would not do to have a solid tint, either blue or green, but there are tapestry papers with soft blues and greens on a light putty grey ground that would not be too dark. However, there is a soft *ecru* tone, neither a tan nor a brown, that would make a good plain wall. Then get your blue and green in the rug and in the cretonne for seat cushions, table top, couch, etc.

Dedication for a Fireplace.

"Tibi plendet Focus."

This hearth was built for thy delight,

For thee the logs were sawn,

For thee the largest chair at night

Is to the chimney drawn.

For thee, dear lass, the match was lit

To yield the golden blaze;

May Jack Frost give us joy of it

For many, many days!

—C. D. M., in *New York Sun*.

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200 VIEWS



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Fourth revised edition, just off the press, is beautifully printed on enameled paper and has embossed paper cover. 112 pages. Size 7½ x 10.

Contents

Halls and Stairways, Living Rooms, Dining Rooms, Sleeping Rooms, Dens and Fireplaces, Billiard Rooms, Kitchens, Outdoor Living Rooms and Garden Rooms.

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Housekeeping by Electricity



OR a number of years, electrical devices in household economics have been appearing on the market which have made a strong appeal to the housewife. The electric iron, the electric toaster, the vacuum cleaner which may be operated by a simple electrical connection already installed have become indispensable.

Probably few householders realize how many such electric appliances are now available.

The "Home Electrical," one of the exhibits in the Palace of Manufacturers at the Panama Pacific Exposition at San Francisco, demonstrates the extent to which electricity is readily adaptable for all kinds of domestic service.

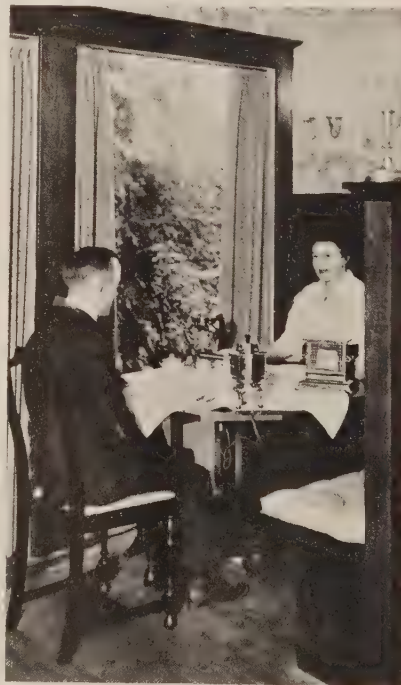
A bungalow has been built for the installation of this exhibit, with exterior of gray stucco, and the roof of red tile. The interior consists of a living room, dining room with breakfast alcove, bedroom, nursery, sewing

room, bath, kitchen, refrigerator room and laundry. There are also an electric garage, a workshop and a small creamery. The home is completely furnished and attractively decorated.

In the living room is an electric "fireplace" of the luminous radiator type. An

place" of the luminous radiator type. An electric piano player will entertain visitors either with classical or popular selections.

The dining room is heated by electricity, as are all of the rooms, and the air is kept in motion by a small electric fan. Here are devices for the preparation of lunches or serving light refreshments; a radiant toaster, an electric coffee pot, a tea samovar, a disc stove for general cooking, a unit-set, a chafing dish for preparing hot soups or desserts and an electric grill for broiling, toasting, preparing eggs, etc. If desired, a very substantial meal can be cooked on the



Breakfast is prepared at the table.

dining room table. Another electric feature is the warming closet at the entrance to the butler's pantry.

To the right of the dining room is the breakfast alcove, very cosily arranged and also equipped for "table-cooking." It looks out upon a vine-covered patio with ferns and flowers and a tiny spring.

Between the dining room and the kitchen is the butler's pantry. In it is installed a combination butler's sink and dish-washer for cleaning the light and valued wares. On a shelf there is a disc stove for making dressings and sauces, and a small electrically driven buffer for polishing nickel and silver pieces.

In the kitchen, the workshop of every home, an electric range, equipped with hot plates, broiler and ovens, is ready to cook the largest family dinner. A constant supply of hot water is obtained from an electric water heater attached to the usual kitchen water tank. A household ozonator and exhaust fan combine to remove unpleasant odors. A new device, which does away with dirty and impure ice, is the electrically lighted and cooled refrigerator, where small cubes of ice also may be obtained.

The bedroom contains many electrical conveniences and articles for the toilet, including an electric massage vibrator, electric curling iron, hair dryer and boudoir lamps. There is an electric heating pad and a small electric water heater in case of sickness. The bedroom is heated by electricity in chilly weather and cooled with an electric fan when the nights are too warm. There is a connection for the vacuum cleaner. Most interesting of all the electrical appliances in the bedroom is the burglar switch, which, when needed, lights every lamp in the house.

Near the bedroom is the nursery with its electric toys and an electric device at the window to keep the room supplied with fresh air without dangerous drafts. The nursery is heated by electricity and there is an electric nursery outfit for preparing medicine, food, etc., in case of sickness.

The bathroom is finished in white tile and porcelain. Here are such electrical conveniences as a hot water cup for shaving, and a glowing electric radiator.

The sewing room is replete with electric appliances for sewing, mending and dress-making. The sewing machine is operated by an electric motor controlled by the foot



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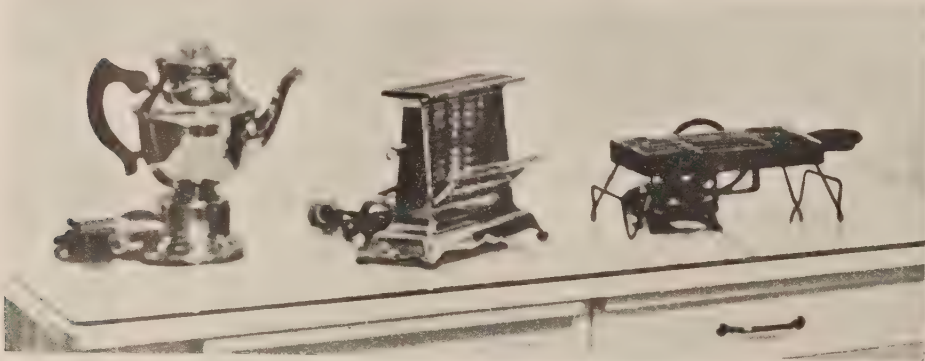
treadle. A three and a six-pound electric iron are located on a convenient board, and a small portable vacuum cleaner is used to pick up threads and scraps of cloth.

The home is equipped with a complete electrical laundry. There is a quiet-running washing machine and an electric mangle, which may be entrusted with delicate pieces; three, six, eight and twelve-pound irons for ironing and pressing, and a double eight-inch hot plate for boiling clothes. A collapsible ironing board folds into a shallow closet, and the flat iron switch is equipped with a pilot light to indicate whether or not the current has been

leaky utensils or broken woodwork. An air heater provides comfort.

In the garage is a light electric coupe, which is kept charged automatically by a mercury-arc rectifier. The lighting batteries are charged by a small vibrator. A small portable search lamp, which can be operated on any electrically lighted car, is used for close examination of any part of the car, and a portable electric tire pump completes the car equipment. Connections are made to the interhouse phone in both the garage and workshop. An air heater is also installed in the garage.

Of particular interest to the visitor from



Ready to prepare toast, tea and bacon.

turned off. An air heater and exhaust fan provide comfortable working temperatures.

Provision has been made, in the shed, for constant water pressure all over the house when the water supply is a well or spring. Here is installed an automatic air-pressure system. The pump is driven by a small electric motor, controlled by a pressure switch.

Nearly every home has a workshop where the man-of-the-house builds and repairs, especially in country places. The shop is equipped with a work bench, bench-type drill press, clipping hammer, electric riveter and grindstone. Then there is a buffing outfit, saw table, bench type lathe and metal melting pot, all electrically operated. Handy little electric soldering irons and an electric glue-pot aid in repairing

rural communities is the dairy. This is equipped with an electrically-driven cream separator, bottle washer, and churn. In conjunction with these appliances is an automatic refrigerator and milk cooler, operated by a thermostat to keep the temperature of the cooling chamber at the proper point.

These electrical devices are simple to use and comparatively moderate in cost. Some of them may be operated as reasonably as an electric iron. It is possible to install many of them without extra operative costs by taking out old carbon incandescent lamps and replacing them with modern Mazda lamps, which save fully two-thirds of the current; and this can be used to run fans, cooking devices, vacuum cleaners, etc., without increasing the monthly lighting bill.



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The Value of Accessories



DO not think we always realize the value, as far as the effect of our tables goes, of the smaller things, little silver accessories, glass with a touch of individuality, a cloth a little out of the common. Note in the illustration shown the delicately etched water glasses, the quaintly shaped pepper boxes, the round bouillon spoons, the little silver baskets for olives and almonds, the lace cloth exactly fitted to the

table, and the general effect of dainty perfection.

While it is delightful to have all these things in solid silver, there is nowadays a really wide choice of plated ware of good design and of indefinite wearing possibilities. The best of these things are as nearly plain as possible, the only ornament a beaded edge or a simple fluting. Particularly good are the tea services which are made in old Queen Anne de-



The accessories are good.

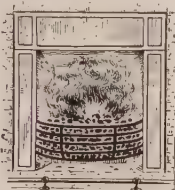
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by warming your home with our open grate fire that does *More* than look bright and warms *More* than one room.

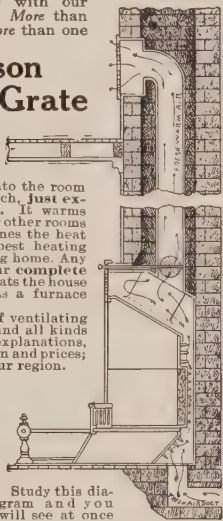
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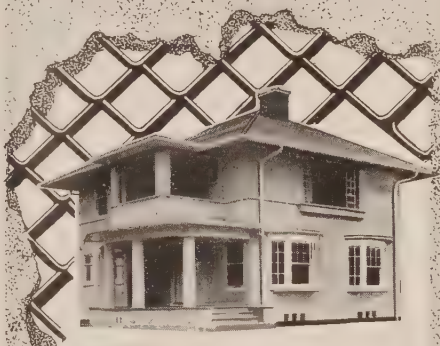


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signs, with fluted bodies and plain tops, and handles of black wood. If one is prejudiced in favor of an earthen tea pot the silver one can be used for hot water. Fifteen dollars will buy a really artistic plated tea service of this sort.

Why not set up a "Savings Box for Silver," into which from time to time a few pennies might be dropped to be exchanged later for something really desirable?

Concerning Lace Cloths.

For people who entertain a lace cloth is a really valuable asset, as it does not get demoralized like a damask one, can be used many times and is not nearly as fussy as the usual combination of linen center and plate and tumbler doilies.

One of the objections to the Renaissance lace, which was so popular a few years ago, and which is illustrated, is that it had a way of stretching out of shape when it was washed. This can be obviated in one of two ways. Either the braid can be sewed to a foundation of not too fine net, filet by choice, before the lace stitches are worked, or instead of the rather sketchy stitches in common use the braid outlines can be filled in with straight buttonholed bars, as is done with cut work. With either method the effect is good and the work will keep in shape with ordinary care.

An extremely pretty adjunct to the tea tray is a fitted cover for it, either of lace or of fine linen with white embroidery. If the latter is used the initials of the housewife should be embroidered at the middle of one side. Any piece of linen gains greatly if it is accurately fitted to the article which it is intended to cover.

The Indispensable Tea Cosey.

The tea cosey is as essential to English housekeeping as the tea pot, and is often extremely ornamental, of handsome brocade heavily embroidered in silk. Sometimes the cosey is plainly covered with silk or satin and is fitted with a detachable cover of embroidered linen or lace, which can be removed when it becomes soiled.

With ourselves the tea habit is not so general, and the cosey is conspicuously absent, but it serves a useful purpose at the piazza supper. It may be of any of a number of shapes, the best being a half oval. Another sort is much like a bish-

op's mitre, being made of four sections curving to a point at the top, the seams defined with a cord. The cosey should be large enough to cover the teapot easily, and be generously wadded, or else filled with down, and the lining should be of thin silk matching the outside.

In color it should either harmonize with the china, or be of the same general color as the dining room walls. A very serviceable cosey can be made of velvet, olive, gray blue, or rose red, embroidered with a single large initial, in crewels heavily padded.

The Latest Fashion in Desserts.

If you wish to be very elegant, instead of the traditional pie or pudding, you will serve a dainty assortment of French pastries, each different to the other arranged in a silver basket or on a plate with a folded napkin. They are passed by the maid, and each guest helps himself to the cake of his fancy with the aid of a broad-bladed silver knife. All sorts of dainties are included, tiny pastry shells filled with fruit in a thick syrup, almost like a jelly, thin layers of pastry separated by whipped cream, little eclairs, chocolate or vanilla, round pound cakes covered with mocha frosting, macaroons and lady fingers. For a formal meal these dainties are far less trouble than anything made at home and if sufficiently varied are sure to be appreciated.

Eggs in Potato Shells.

There are here and there people who cling to the habit of having potatoes for breakfast. To them may be commended a rather unusual dish. The potatoes, which should be large and of uniform size, are baked, the tops cut off and the center scooped out, leaving a wall about half an inch thick. Into the cavity are put a few bread crumbs, a lump of butter, a broken egg, a dash of pepper and salt, more bread crumbs and more butter. Each potato is set into one of the sections of a muffin pan and they are baked until the eggs are set.

Another breakfast dish consists of thin slices of broiled ham served with potatoes Philippa and hot corn bread. The potatoes are boiled, chilled and cut into dice with half their bulk of white turnips. A white sauce is made with a tablespoonful of flour and one of butter and a cup of cream, in which the potatoes are heated.



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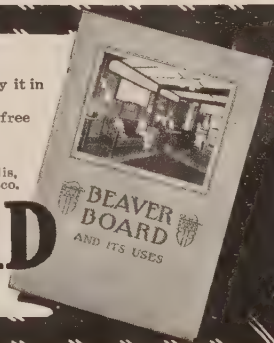
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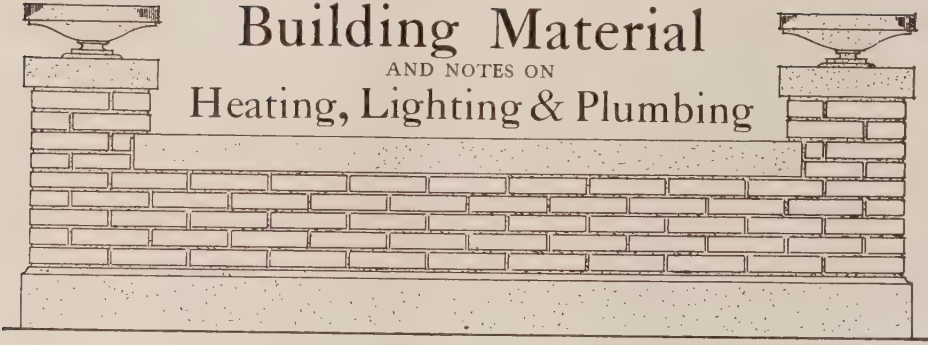
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To Avoid Dingy Stucco.



RITICAL examination shows that stucco is a more or less porous material which, in smoky atmospheres, sometimes absorbs the soot-laden water with which it is brought into contact. During a rainy season considerable soot is carried into the pores and the color of the stucco becomes perceptibly darker. It has been found that this pore-filling process only lasts two or three years, however, at the end of which time the pores of the stucco were completely filled or clogged with the soot.

The natural action thus observed suggests a method for overcoming this difficulty. Fill the pores with a white or colorless waterproof substance before the natural process has had time in which to fill them with soot and dirt.

There are two ways by which this result may be accomplished. At the time the stucco is being mixed a small quantity of a reliable integral waterproofing should be added to the water used in the process of mixing. Only a small quantity need be used and the cost should not exceed 1½ cents per square foot, or about \$35.00 for an ordinary eight-room residence. The integral paste or powder is carried into the pores and it is found that the stucco so treated is permanently waterproof and stainproof.

The second method is used to waterproof and stainproof after the completion of the building. It sometimes happens that the builder does not learn of the integral method until it is too late to use it, and in this case a colorless waterproofing method supplies the omission. It is a wonderfully simple process, inexpensive and practically as efficient as the integral

method. The surface may be brushed with two coats of a colorless waterproofing, the liquid enters the pores and there deposits a clear, colorless, water-resistant substance which effectively protects it from rain and smoke.

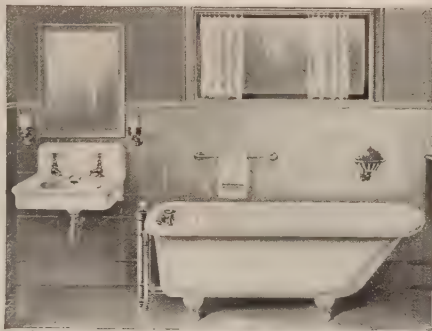
To Dry Paint.

The method given below for drying paint under especially trying conditions, comes from Australia. It may be used on damp or green wood. In circumstances where paint ordinarily would not dry at all, or would dry only very slowly, drying may be made certain by the addition of a small quantity of lime. To half a pot of paint add a teaspoonful of lime. Take the dry lime and work it well into a small quantity of the paint with a putty knife. Then add this to the paint. The paint will then dry hard in a short time. The result obtained is much the same as that which follows the application of a coat of paint over a surface which has been previously limed. It is generally thought that when paint dries on a surface previously limed, it is because the lime has killed the grease. Evidently this is only half the explanation, because it is clear that the lime on the surface, mixing with the paint, has an effect similar to that following the use of a powerful drier.

A Reinforced Plaster Base.

The need of a greater protection against fire as well as the desirability of as great protection as possible against the weather is making itself felt in new building materials.

The reinforcement in concrete has revolutionized building methods. The idea of the reinforcement is being utilized in



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Sample of cement rough-casting on the fabric attached directly to sheathing without furring.

other ways. A new material has lately come on the market by which a plaster or stucco surface may be reinforced by galvanized steel wires crossing on a diagonal, with a tarred felt backing. In applying the plaster or stucco to the surface the wires separate and become embedded in the plaster. Thus a building coated with cement mortar is encased in a thin slab of reinforced concrete.

We are told that the more or less accidental discovery of the perfect bond between cement mortar and roofing felt was the fundamental idea on which this material was worked out, and that the present method of combining it with steel wires which furnish the reinforcement for the plaster slab, is the result of nearly ten years of continuous experiment.

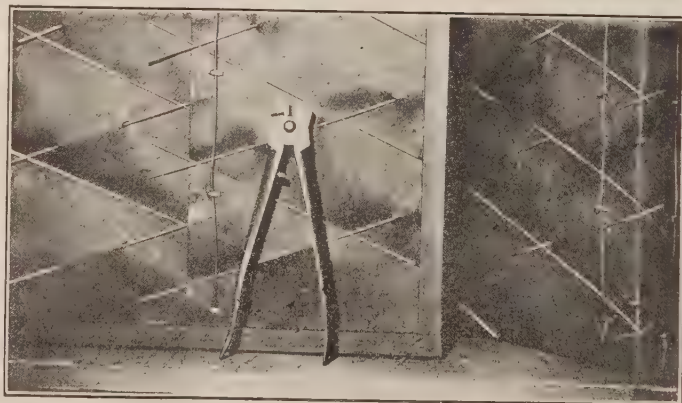
When steel and concrete are combined special precautions must be taken for the preservation

of the steel guarding against the incursion of rust. The steel must be completely and closely embedded in the mortar or concrete. Should air pockets in the mass of concrete be formed around the steel, rust will surely follow and will sooner or later destroy the reinforcement. Experiments of engineers as well as experience tends to show that concrete, of which cement mortar is the essential factor, is

the best known preservative of steel.

This material may be used for either exterior or interior work, applied over sheathing and studding or to steel rods. It may be used for ceilings and it is even suggested as a foundation for concrete roofs.

The first cut shows a sample of the material partly covered with stucco, and showing the sheathing over which it has been applied; the second gives the method recommended by the manufacturers.



Photograph which shows recommended method of attaching the fabric to wood; also the wire cutter most convenient for cutting the fabric.

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house upon which

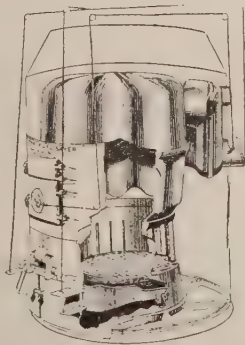
Zinc

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Mrs. E. A.—“Could you tell me just the amount of putty, lime and sand used in the rough plaster finish I wrote to you about? The walls I saw in California were beautiful, but no one here seems to know anything about it.

“They were finished in this sand finish and when tinted were just what I want for my little house. People ‘sit up and take notice’ of this house and I am so pleased and proud of it and it only lacks this sand finish to make it not only the finest but the prettiest in town.

Ans.—In reply to your inquiry regarding sand finish, will say that Page 44, in the book on construction, “The Building of It,” seems to me answers same completely.

It is as follows: “It is often desirable to finish the walls with a sand surface for tinting in water color or frescoing. This is called a float finish. It is obtained as follows: First, mix fine, clean sand specially sifted for the purpose, with the putty and then add a small amount of cement plaster (plaster of Paris), put on with a trowel and brought to a fine sand surface, or finished with a cork or carpet

float for walls that are to be tinted or frescoed. It would be well to have the plasterer mix a sample on the wall before deciding upon the exact fineness of this sand finish. I have found in my experience that a mixture of one-half fine white sand and one-half plastering sand, finely screened, will give a desirable surface.”

Stock Sizes for Windows.

H. C. B.—“We are trying to get some exact information on the length of windows. Do you make the window opening of definite size? Do they run even feet, or even half feet, or do you just make them as seems desirable from an architectural and economical standpoint? In other words, is there any standard, or set of standards?”

Ans.—We are very glad indeed to have you take up with us the usual method which we follow in treating the sizes of windows in residence work. I would say that in most of the designs for the small houses of the bungalow type particularly, we generally aim to use a stock window, double hung sash, which is 2'-8" x 4'-10" and place the top of the window on line with the top of the doors. In work of this kind the doors are usually 7' high. This treatment makes a very nice frieze line around a low studied room and easy for simple decorative effect.

Two feet eight inches is the maximum width for stock sash for double hung windows, the height may vary from 3'-10" to 5'-10". A 4'-10" window places the sill 2'-2" from the floor, while a window 5'-2" makes the sill 1'-10" from the floor. Stock heights vary by 4", stock widths vary by 2".

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No other country in the world has produced so many valuable woods as North America. It should follow that the people of America know all about wood values and uses. In no other country, however, is so little attention paid to the selection of woods for particular uses.

The early settlers made their selections and used timber wastefully. The only price they paid was labor. Their reckless use made serious inroads on the supply of certain classes of timber. To make up the deficit in the supply other woods now are being used. It is not so much a question of their being of quality inferior to that of the wood first employed as it is a question of being structurally different. It is for that common sense reason that Keith readers are now offered aid in making their selections.

Keith readers should get away from the national carelessness in using the valuable and varied products of our forests. They should "select" specific kinds of wood for the particular purposes for which they are adapted. They should cease to "order" sizes. This change will place them on a par with the wood users of other countries where the American product is highly prized and is used intelligently.

There is no necessity for you just to "happen" to get the right kind of wood for the purpose for which you desire to use it. You can profit by the use of wood and derive satisfaction from it if you will give this subject a little thought at the right time and that is before the work is started.

One great drawback to the profitable use of wood has been the lack of understanding of the merits and values of particular woods for certain uses. Wood is used carelessly and without thought for its possibilities.

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AUGUST

1915



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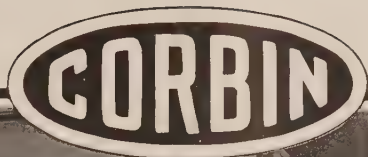
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(Continued on Page 77.)



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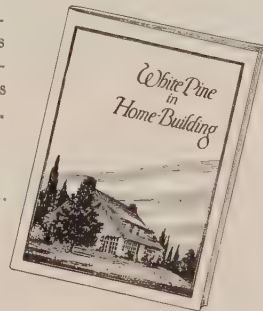
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(Continued from Page 74)

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Heppes Co., 1031 So. Kilbourne Ave., Chicago, Ill.
McClellan Paper Co., Minneapolis, Minn.
Reynolds, H. M., Asphalt Shingle Co., W. Grant St., Grand Rapids, Mich.

Screen Cloth.

Gilbert & Bennett Mfg. Co., 277 Broadway, New York City.

Sewage Disposal.

Andrews Heating Co., 1471 Heating Bldg., Minneapolis.
Ashley House Sewage Disposal Co., 108 Morgan Park, Chicago, Ill.
Kewanee Private Utilities Co., Dept. D, Kewanee, Ill.

Shades (Porch and Window).

Aeroshade Co., 380 Oakland Ave., Waukesha, Wis.
Breneman, Chas. W., & Co., Reading Rd., Cincinnati, Ohio.

Shingle Stain.

Berry Bros., Detroit, Mich.
Cabot, Samuel, Inc., Boston, Mass.
Sherwin-Williams Co., 629 Canal Road N. W., Cleveland, Ohio.
Standard Stained Shingle Co., 1022 Oliver St. No., Tonaawanda, N. Y.
Transfer Stained Shingle Co., 166 Main St., No. Tonaawanda, N. Y.

Stucco.

Atlas Portland Cement Co., 30 Broad St., N. Y.
National Kellastone Co., Room 503, Asso. Bldg., Chicago, Ill.

Vacuum Cleaners.

Kewanee Private Utilities Co., Kewanee, Ill.
United Electric Co., 10 Hurford St., Canton, O.

Varnish.

Berry Bros., Detroit, Mich.
Bridgeport Wood Finishing Co., Box 103, New Milford, Conn.
Forest City Paint & Varnish Co., Cleveland, Ohio.
Lowe Bros., 465 E. 3d St., Dayton, Ohio.
Pratt & Lambert, 121 Tonaawanda St., Buffalo.

Wall Board.

Beaver Board Co., 211 Beaver Rd., Buffalo, N. Y.
Heppes Co., 4504 Fillmore St., Chicago, Ill.
N. W. Compo Board Co., Minneapolis.
Philip Carey Co., Cincinnati, O.
Upson Co., 3 Upson Point, Lockport, N. Y.

Water Supply System.

Kewanee Private Utilities Co., Dept. D, Kewanee, Ill.

Window Hangers.

Casement Hdwe. Co., 516-9 So. Clinton St., Chicago, Ill.
Kees, F. D., Mfg. Co., Box 102, Beatrice, Neb.
Phenix Mfg. Co., 048 Center St., Milwaukee, Wis.
Watrouse-Acme Mfg. Co., 520 S. W. 9th St., Des Moines, Iowa.

Wood Stain.

Berry Bros., Detroit, Mich.
Bridgeport Wood Finishing Co., Box 103, New Milford, Conn.
Johnson, S. C. & Son, Racine, Wis.
Sherwin-Williams Co., 629 Canal Road, Cleveland, Ohio.

MISCELLANEOUS.

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Chicago Dryer Co., 628 S. Wabash, Chicago, Ill.

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KEITH'S MAGAZINE

ON HOME-BUILDING

M. L. KEITH, Editor and Prop.

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Just a Word

The Increased Cost of Building



WHEN you are railing at the advanced cost of building over that of many years ago, just stop a minute and consider what you are getting in return today for the advance. Five years ago you built a good frame and stucco house for five thousand dollars. It was a model of its kind when it was built. Ten years ago you built a brick house for about the same figure. To build a house of the same size and class now would cost half as much more. Would you be satisfied to go back into the brick house now and live there, just as it was when you built it? How much expense have you put into it to keep it up to date? Your first heating plant was not duplicated when you put in the new one, was it? How much more did you pay for the second one? It was worth the difference, or you would not have changed. You have added sleeping porches, and you have added some hardwood floors. You would put different fixtures in the bathroom now. Of course they are better, and though they may not be more expensive; probably the labor will cost more. You would put in another bathroom if you were building again, or more fixtures in the basement, at least. Yet, the laundry would need to be a little better. Labor is so high you do not like to have to keep the woman an extra hour, when with a more convenient arrangement she would finish the work in a day. There is so much bad weather in the winter that you need either a clothes dryer, or at least a good clean open space for drying the clothes. The kitchen is not very convenient, either. Wife says she might get along without help sometimes, if her house were as convenient as the new house next door.

You would use a better finish all through the house now; that was considered as good as any one needed when it was built. And the fireplace might be improved. The lighting fixtures are out of date,—yes of course they are made heavier and better now. In fact you are afraid of the whole lighting installation. There are so many fires which are supposed to be caused by the electric wires, and you are not sure the insulation is perfect. The requirements were not so rigid when the house was built.

Of course it costs more to build now than it did ten or even five years ago, but, don't you get your money's worth for a good deal of the additional expense? Don't you save your own time and energy as well as the labor for which you must pay? People will not put up with the inconvenience now which a few years ago they took as a matter of course. They pay their money and they save themselves.

KEITH'S MAGAZINE

ON HOME BUILDING

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Unhewn timbers give a pergola effect to the terrace.

KEITH'S MAGAZINE

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No. 2

A Dutch Colonial House

Margaret Craig



IT IS interesting to know that the Dutch Colonial Houses were not a direct offspring of those built in Holland, but were built originally by the Dutch colonists as well as by the English and French who settled among them.

The gambrel roof, whose lines are broken by interesting angles, was an innovation entirely resultant from influences in this country. Brick was used almost exclusively in Holland, while

stone, lumber and plaster—the materials at hand—were chosen by the colonists.

In southern California where there is a great demand for the construction of small homes, the Dutch Colonial is found to be very practical. Built with good lines and surrounded with plenty of space, there is no style of architecture more suited to a suburban home.

The home illustrated in this description is a very charming example of a Dutch Colonial house that answers, as



The gambrel roof has an added interest by reason of the dormers.

far as possible, the needs of a modern-times housekeeper, and yet is faithful to the general characteristics of its prototype.

The walls of the first story are of a soft gray green cement, which blends beautifully with the mossy green roof and pearly white trim. The gable ends are treated with broad shakes of the same shade as the cement walls.

As is true of all colonial houses, the entrance is a very happy note of accent. The semicircular stoop is shaded by the



The windows are interestingly grouped.

hood, formed by the projection of the eaves of the high pitched roof.

The entrance walk to the home leads up at one side of the terrace, while the automobile approach is on the other side, thus leaving a wide space of lawn in front of the house.

In walking around the house to observe its salient features, I noticed the careful grouping of the windows. The owner remarked that it had been one of the working problems of the construction and that the exterior relation of the windows had never been sacrificed to the interior construction. Curves in the house had been used repeatedly to give interesting effects as in a balcony, in the paths, and in the porch.

The entrance door, which is made of a single panel, receives additional interest from the brass thumb latch. The brass knocker is well placed and does not lose its colonial significance by being electrically connected, through the hinges, by a concealed wire. The door is flanked on either side by sidelights, united by a fan light above.



The entrance door has a brass knocker and thumb latch.

The hallway is very lovely, with walls covered with a mouse-colored paper having a French basket design. Draperies of a rich velure in a deep mulberry shade hang at the wide doors on either side which lead to the living room and the dining room.

Length is given to this hall by a view through the glass door at the end into a quaint breakfast room.

The stairway is colonial with a mahogany rail uniting the ivory white spindles. The wainscoting, here, is unusual, as it has no hard lines, due in a measure to the insertion in the corners of large pieces of sheet iron, that were rounded and painted in the ivory tone used for the rest of the hall. A lamp hangs from the ceiling, made after the fashion of old colonial lanterns.

On the right is the living room, well proportioned, abundantly lighted, and well open to the breezes in summer weather. The fireplace is simply designed with ivory mantel and facing of cherry red brick. The wall covering and woodwork are similar here to that used in the entrance hall and dining room, and it forms a soft background for the Sheraton furniture, which has a neutral brown shade of upholstery.

French doors lead from this comfortable living room to the columned porch at the south and two single French doors open upon the grass terrace, flush with the floor.



The stairway is colonial with mahogany rail and treads.

Opposite the living room is the dining room. Above the wainscoting, the wall is papered with a soft colored striped grey paper in two tones, which harmonizes with the window valences of cretonne in plum color, black and silver flower design. The silver chandelier above the



French doors lead from the living room to the porch.

round English table is quite effective, hung by a plum colored silk cord.

The breakfast room is very pleasing at the end of the entrance hall, papered in an old rose and blue all over designed wall paper. The casement windows, here, forming a curved wall at the end practically make it an out-of-door breakfasting room for the summer. Muslin curtains, ruffled and crossed, that are used in all of the windows of the house are used here also. A cupboard, containing the breakfast china of corresponding colors, was built in under the stairway curved projection, and makes the little room quite complete.

The kitchen of the house is small, but ideally proportioned. Windows, opening upon the wonderful mountain scenery, are above the sink, and the stove is so arranged that light comes in over the

right shoulder. An ice-box is built in so that it can be reached from the outside porch as well as from the kitchen without extra steps. The laundry is on the screen porch that forms a hall to the maid's room.

On the second floor there are three bedrooms, two baths and a sleeping porch. These rooms are furnished in mahogany with chintz over-curtains at the windows.

The rear of the house is as attractive as the front of the house and shows careful attention to the grouping of the windows.

It is constructed very thoroughly, which is not always the case with houses of this semi-tropical land. But a solid construction is found to be a great advantage in this little house in keeping out heat, cold and unnecessary dampness.

The Breakfast Room

Charles Alma Byers



THE modern housewife is finding the little breakfast room a most convenient and desirable feature. It is fast becoming extremely popular, even in the small inexpensive home. Especially in California has the breakfast room become a unique neces-

often connected with the living room by a broad open arch, and therefore it affords little or no privacy from this latter room. A special little breakfast room is also more cozy than the regular dining room, and usually it is so designed and located as to receive a flood of morning sunlight,



Breakfast may be a very simple affair.

sity. The breakfast is usually a very unconventional meal, and there are many reasons why some small shut-off room where it may be served in strict privacy is to be much appreciated. For one thing it means less work in keeping the house always in order, and then again its table may be kept set for possible irregular breakfast hours without being conspicuous to early morning callers. In the small home of today the dining room is

which is to be greatly appreciated. It starts the day more cheerily.

The breakfast room should, of course, be located so as to be convenient to the kitchen, and is therefore invariably somewhere in the back part of the house. Often it borders upon some small side pergola or porch, upon which it opens through glass doors. One or more of its walls should be largely of windows, and from these windows one should be able to



With many windows it receives a flood of light.

look into the garden or out upon some other pretty scene. And, lastly, the room should be located so as to have an eastern exposure, that it may receive the morning sunshine.

In finish and decorations the room should be bright and cheery. In many cases the woodwork is enameled white, and the walls are covered with paper of light, delicate colors. White moiré paper or a delicate tint which softens the sunshine is, in fact, often used with good effect. Cream and buff

tones are also much used, and these colors unquestionably give a very warm and cozy appearance. In a few instances I have seen the room done in tones blending into olive green, which produced a most delightful interior. The woodwork is then stained to also carry out the scheme, and the walls will probably be covered with Jap-

anese grass cloth effects. The windows may be curtained with material that either harmonizes or emphasizes the general color scheme.

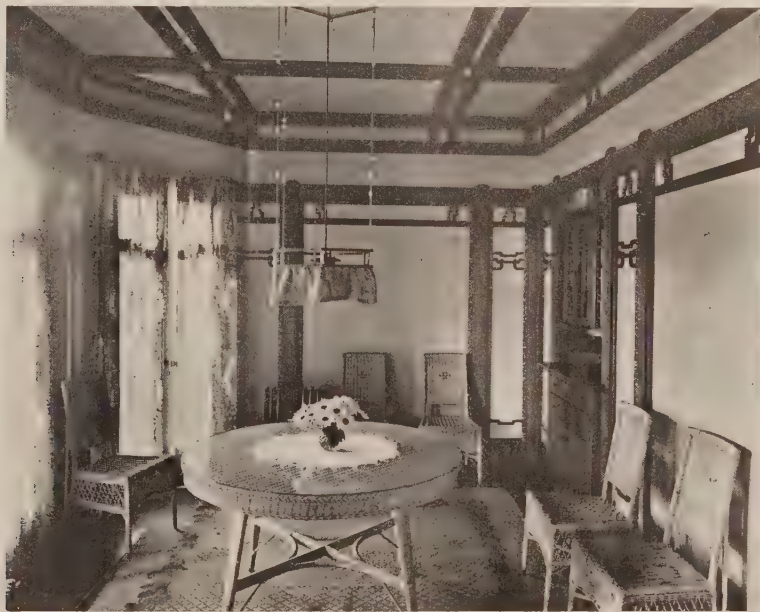


The windows look into the garden.

Very little furniture is required—a table and a few chairs only. These may be of almost any kind, but if of wicker or willow the room will be made even more bright and cheery. Tables and chairs, of suitable design, are now to be had of this material from almost any furniture store, especially in the natural color. If it is impossible to get them in the desired

on a cold or chilly morning it naturally falls far short of serving its purpose.

There are many reasons for recommending that a breakfast room be included in the plans for your prospective home aside from those of its primary purpose. Even if it is eventually found that the breakfast room as such can be dispensed with, it can be admirably util-



The woodwork is effective.

shade to match the room, the dealer will be able to have them colored to suit.

Some sort of cupboard or sideboard is quite desirable, although not essential. Often such a feature is built-in and is made a permanent fixture, harmonizing, of course, with the remainder of the woodwork. Around the wall may also be extended a small plate shelf, such as is usually employed in the regular dining room. And the room should, by all means, be equipped with some means of heating—either with a gas grate, a small stove, or from a furnace. If the room cannot be made warm and comfortable

ized for other purposes. Such a room always makes an excellent sewing room, or it may be used as a nursery. Then, too, if the occasion arises, it can be converted into a servant's room or an extra bedroom. In fact, while it is originally planned as a charming little breakfast room, it also may be considered a sort of emergency room. Conditions frequently arise in later years that make another room almost imperative, and of course a breakfast room is never absolutely essential. Therefore you will possess it to fall back upon.



A circular breakfast room. The adjunct of an elegant home.

This room is usually comparatively small, and yet it is quite large enough to be utilized, if desired, for any of the purposes mentioned above. Eight by ten feet is a very satisfactory size, and it may be even a little smaller, or considerably larger. If a small closet can be built off from it, so much the better, if it should be eventually used for any other purpose.

Herewith are reproduced photographs showing several breakfast rooms of especially charming style. A mere glance at them is sufficient for one

to realize that they should aid very materially in making the breakfast a cozy and cheering event, and a more careful study of them will give one some valuable sug-

gestions for making the room what it should be. The invariable simplicity and good taste shown in the finish, decorations and furnishings of the rooms should be particularly observed. In several instances the furniture is exclusively of willow or reed-craft, in the natural or a stained color, and as will be noticed, the effect is charming. Some of the rooms also contain a small,



An octagonal breakfast room.

simply-designed built-in buffet, which constitutes a most admirable feature. The breakfast room is, of course, usually square or nearly square, but one of the illustrations shows a room of octagonal shape and another room is circular. The latter is a feature of a particularly elegant home, and the finish and decorations are es-



Glass knobs on the sideboard echo the cut glass.



A built-in cupboard with leaded glass doors.

pecially rich and are very effective.

The question of design for the lighting fixtures has the same relative importance in the breakfast room that it has in the dining room. A center fixture for the ceiling is almost necessary. The standard of design for the commercial fixture is not equal to that in other classes of furnishings. So lighting fixtures must be selected with great care if purchased ready for installation.

It is becoming quite usual, as it certainly is logical, to have the lighting fixtures designed by the architect or decorator in the same way that the sideboard, cupboards, special windows or other features of the interiors are designed. This brings it in keeping with the rest of the interior during the day-time, without in any way interfering with its real purpose when it is illuminated.

In anything so informal as a breakfast room the fixtures can not be either heavy or elaborate. The lighting fixtures in each case shown here are dainty and in perfect keeping with the room, which is a detail that should not be overlooked.

Impressions of English Domestic Architecture

Eleanor Allison Cummins



A bit of Old England.

WHEN I use this phrase I am not thinking of exceptional houses, planned by eminent architects, their cost running into the thousands, not of dollars, but of pounds sterling—I am thinking of the houses of people in modest circumstances, whether in the cities themselves or in their suburbs, or in country places.

For comfort and convenience there is no comparison with our own. The English house is cold in winter and hot in summer; its heating is inadequate, its water supply is limited, its kitchen arrangements are antiquated. Bathrooms are by no means a matter of course, nor

does the provision of a stationary bathtub imply, as with us, a supply of hot water. Not very much washing is done in houses but when it is it is achieved in the most primitive way in portable tubs. In city houses the kitchens are usually in a basement wholly or nearly below the street level, and food is carried to and from the dining room over a long flight of stairs. After one is familiar with the routine of an English house one understands why the staff of servants is so large and why the "general" is so overworked.

But when it comes to the esthetic aspect of the English house we can learn many profitable lessons. The standard of taste is much better than with us. Even the interminable rows of tiny houses in the outskirts of London, the homes of clerks and small tradesmen, people living on tiny incomes which, with our higher prices, would not keep body and soul together in the United States, are far more satisfying to the eye than the same sort of houses at home. The improved dwellings for artisans, erected by the London County Council, great blocks six or seven stories high, in which a flat of five rooms can be had for about ten dollars a month, in some neighborhoods for much less, are really creditable architecturally, with well proportioned facades, charmingly pitched roofs and casement windows, arranged at agreeably adjusted angles around immaculately clean courts. Indeed the writer must confess that at her first sight of the Westminster group she supposed she had run upon a collection of studio buildings.

English houses have one great point in

their favor—their solidity of construction. With the exception of a very few timbered houses, preserved as a matter of sentiment, all English houses are either brick or stone, and very ordinary brick and stone at that, the quality of the brick being about the same as that of the cheap red brick which we use for the backs of city houses, or for factories. The stone most frequently used is a light colored sandstone, and most of the bricks are a medium shade of brown which the prevalent soft coal smoke turns almost black. A good deal of dark red brick is used and this, too, darkens perceptibly. Sometimes, but by no means generally, facings of sandstone are used with brick, and in the newer houses concrete walls are common.

The city house, even the city house of pretensions, is extremely plain. There is more architectural distinction in two or three side streets off Central Park than in the whole of Mayfair and Belgravia.

Even the London houses of the great nobles are very simple, spacious but in no way ornate, their only dignity gained by their withdrawal behind walls. The average London house stands close to and on a level with the sidewalk and is high out of all proportion to its width. English legs are sturdy and accept bedrooms up three or four flights of stairs uncomplainingly.

But these very simple houses have a number of redeeming points. For one thing, there is always a pillared porch at the door, its top forming a balcony to which one steps from the long windows of the drawing room on the first floor. Sometimes there is an extension of this balcony of narrower width running entirely across the house as well. In spring and summer these balconies are gay with flowering plants and crowned with awnings with a very charming effect.

Some small and narrow houses are without a porch. The door is sure to be



Half-timbered houses are charming.

arched with a latticed fanlight and side-lights and although there is no balcony the French windows of the first floor open onto semicircular projections closed in with well designed iron railings, the enclosed space just big enough to hold a bay tree or other bit of greenery.

The door and the windows play a great part. One does not often see the hardwood doors of which we are so fond. The door is usually enameled in some decided color, usually green, though a dark blue is very common, and even red coach var-

house in Kensington which seemed almost all windows on two stories, seven being set in the section on one side of the door, whose end was semicircular, the other side having a single very wide and rather low window on each story. All these windows were leaded and in small panes, and the curtains of beautifully colored fabrics added much to the effect. I do not think English window glass is often plate, and it is always cut into panes of moderate size. On ground floor windows some sort of a screen is



The window openings are many and large.

nish is pressed into the service. If the door is green the window frames and sills will be green too, otherwise they will be white. This treatment sets off a house wonderfully and the windows themselves are often charming. There is a great fondness for whole windows made up of little leaded panes with possibly a bit of ornament at the top traced with the leaded lines. Very often, too, the windows are casements, usually opening in, so they need not interfere with the window boxes.

Light is rather precious, under the low and often clouded English sky, and window openings are many and large, and add greatly to the appearance of the houses. I remember a charming concrete

often adjusted to the lower quarter. It may be of small leaded glass squares, it may be a panel of carved teak, of Turkish or Japanese lattice work, or it may be of wicker, and thin inside curtains are dispensed with.

While flat roofs are common enough in cities they are by no means universal and are rarely seen in the suburbs or the country. The English architect is alive to the decorative value of the sharply pitched roof, sometimes beginning it just above the first floor and including two upper stories under its slope. The sky line in England is almost always interesting and the size of the chimneys, accommodating as they must from eight to a dozen flues, from as many open fireplaces, is an im-

portant factor. You may have two high, flat fronted, pitched roofed houses standing side by side with the great chimney thrusting forward almost to the line of the cornice in a most effective way, and the outline gains much from the chimney pots, the upward extensions of the flues, which often have some sort of an ornamental cap. To see this combination of roof, chimney and chimney pots at its

best, you should be out early in misty, gray winter morning when all details are lost and only the picturesque outlines are thrown up against the sky.

The paint pot plays a great part in England. With the first spring days the accumulated grime of a twelvemonth is cleaned off the dingy stucco-fronted



Pitch roofed houses standing side by side.

stone or brick houses to be replaced presently by a coating of ivory white paint. In the case of the brown brick houses only the ground floor and the trimmings of the house will be painted but the others are entirely repainted. When the window boxes and balconies are ablaze with flowering plants the general effect is so charming that you quite forget that most of the houses have no architecture to speak of.

The equable temperature has something to do with the charm of the English house. Shrubbery is luxuriant and at least partially evergreen and the grass is green in midwinter, and the great number of small squares and "gardens" secure a pleasant outlook for a large proportion of the houses. The crescents, long curving rows of houses, are carried around a semicircular space of trees and grass, common, as are the squares, to all the residents of the row, each house having its key, its children playing, and its dogs taking the air in the enclosure. The arrangement is not democratic, but England is preeminently the country of the few and not of the many.



A picturesque street in York.



The Use of the Pergola

PERHAPS no feature of the out-of-doors makes a stronger appeal than the pergola, vine covered, and with a setting of flowers. When a beautiful pergola and formal garden are made as simply an unused adjunct to an elaborate house one feels that

it is a lost opportunity. The more completely it has been planned and worked out, the stronger is the feeling likely to be, and this for a very simple reason. The people who are able to build the elaborate pergolas have so many other interests that either they do not know how or do



With cement posts and rustic timber work.

not care to use so simple a pleasure. Blessed is the man, and more especially his family, who can do both.

Perhaps this is the reason that the unpretentious affair, built of trees that have been cut in the woods, if one is so fortunate to have access to the woods, with unhewn beams overhead and rustic trellis work has such an attraction for us. The interest and the labor of the differ-

summer house overlooking the Bay of Naples. We have a tendency to make the pergola itself into a summer house, with seats and places for tea table and hammocks, protected by its screen of vines and climbing flowers.

The pergola, when once built, grows in usefulness and beauty from year to year with a small amount of care. But the growing things are the work of each com-



A very simple arbor will support vines.

ent members of the family are so intimately connected with it. Perhaps the remembrance of the weariness of its making emphasizes its restfulness when completed.

The original use of the pergola was that of a covered walk, wide enough for seats at either side, such as the pergola at the Capuchini convent at Amalfi in Italy, so well remembered by travelers and so well known in pictures, leading from the convent, now a hotel, to the

ing season. A rough arbor is all that is really necessary to support the vines, make place for flowers, and give shelter and shade, yet the beauty of the pergola itself carries one into more ambitious projects. The ease with which white cement may be handled tempts one to use it for the garden settings, using the rustic timber work for the beams overhead and trellis work. Seats and perhaps a fountain seem naturally to follow and a beautiful garden is achieved.

Linking the Garden with Home Life

M. Roberts Conover



IF one owns a garden merely for its products it may not enter into his life and thought any more than would a city market, a huckster's wagon or any other source of supply, for in that case of course it is a vegetable garden. Where a garden bears such a remote relation to its owner its possession is of value only in an economic sense.

Notwithstanding its wide utilitarian purpose, the word garden has a fragrance and a sense of freshness. Important as it is as a source of supply, it is rightfully a much greater factor in the home life. Granted that it should bring beauty to the family life, there is yet another relation which is of greater importance and this comes through the personal interest of those who tend it.

This kind of enthusiasm is akin to that elemental emotion which gathers around the acquisition and is inspired by the possession of a home. It inspires a man to labor such as he would not think of doing for a greater cause. You could not hire a man to work for you as he will work in his garden. Even the traditional



It should bring beauty into the family life.

boy will work in his own garden, much as he may resent weeding the garden which belongs to the family as a whole.

It is unfortunate perhaps, in many ways, that this care of the garden should in so many cases be entirely the work of hirelings. Probably no other possession can give a greater common interest to the family as a whole. Every family having the available space should be capable of achieving a suc-

cessful garden, each member undertaking a part which appeals to him most.

It is astonishing how wide a field of subjects is covered in the simple making of the family garden. First in matter of time and possibly of importance is the chemistry of the soil, the food needed for the growth of the plant. This may appeal to the youth in college, while the daughter of the house may be more interested in the color scheme of the finished result, that there shall not be too many scattered flowers. The green of the sod is the background on which the color of the garden is painted.

Then there is the shrubbery, the old-

fashioned perennials which may have a touch of sentiment in their selection. The placing and selection of a few trees. And, not by any means last, the vegetable garden, which may have a screen of hollyhocks or sweet peas.

All of the family, husband, wife, children and even the guest may find something about the garden to touch them personally, something which gives delight as well as occupation. It may be the joy of the flowers, the wonder of its rapid and changing growth or in the fact of its response to care.

To make its interest real, its work should be so apportioned that each member of the family has some definite part in its care, else the work may suffer because the general responsibility is not individualized.

Children can help much with the actual care of the vegetables and flowers as well as with the gathering of the garden's products and they are the better for it. Pay them for a certain proportion of the berries they pick, or of the vegetables which they bring in to the cook as she wants them, and they will see the reason



In some part of the garden there should be a rest spot.

for raking, hoeing and weeding and all of the multitudinous labor in the preparation of the garden.

In some part of the garden or near to it, there should be a rest spot, either a simple seat under a tree or some other shade—something that will invite the family in their rest moments. Make a place for a hammock and a book and perhaps a tea-table, something that will invite the family and the guest out of doors.



A rustic seat of cobble-stones and brickwork under a tree.

The Treatment for a Corner Plot of Ground



WHEN a plot of ground faces on two streets a larger opportunity is given for a treatment of both the house and grounds. The results may be much more satisfactory than when the lot is enclosed on both sides by property over which one has no control. People are beginning to seek simple lines for their homes, and to build of good substantial materials, at the same time having an eye to color and to general livable conditions. The house here shown is a satisfying solution of the living question. From the outside it is dignified and restful. The plaster frieze, in which the second story windows are set, above the brick veneer, gives good proportion and color. Even

a veneer of brick has lost its insincerity to us, for it is not treated as an imitation of a solid brick house and deceives no one, nor is it intended to deceive. Brick makes a better outside surface than siding, shingles or plaster and it is very commonly used as such. Indeed modern construction scarcely knows a masonry wall which is surfaced with the same material of which it is built.

The internal arrangement of the house is essentially modern. The living room is the key to the whole plan. It is good size, with the fireplace seats and windows taking one side. It communicates directly with both dining room and kitchen. The dining room has an attractive group

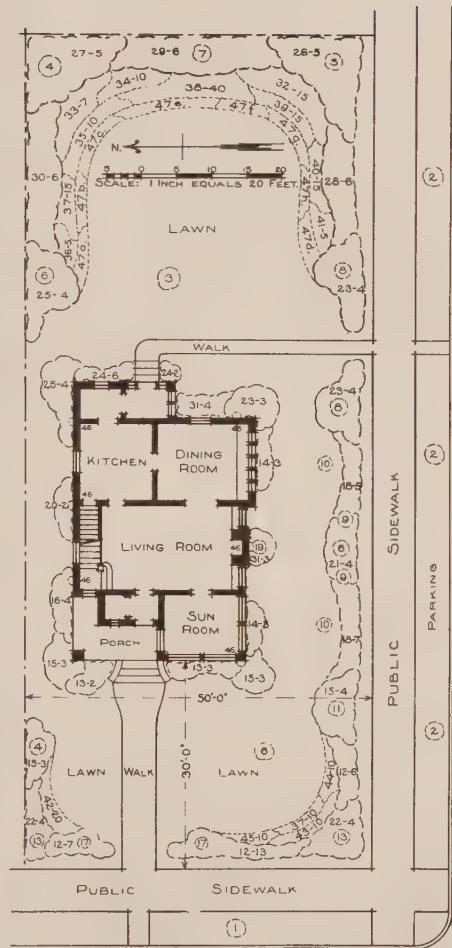


People are beginning to seek simple lines for their homes.

Planting List.

Plants Feet
apart

1. American Elm (*Ulmus Americana*) or (for St. Louis and south) English Elm (*Ulmus campestris*) 1 ...
2. Sugar Maple (*Acer saccharum*) or (for St. Louis and south) Norway Maple (*Acer platanoides*) 3 ...
3. Hackberry (*Celtis occidentalis*) 1 ...
4. Ash (*Fraxinus Americana*)... 2 ...
5. Bolleana Poplar (*Populus Bolleana*) 1 ...
6. Mountain Ash (*Sorbus aucuparia* or *S. Americana* or *S. quercifolia*) or (for St. Louis and south) Maiden Hair Tree (*Ginkgo biloba*) 3 ...
7. Thorn (*Crataegus coccinea*) or (for St. Louis and south) Bechtel's Crab (*Pyrus Bechtel*) 1 ...
8. Buckeye (*Aesculus glabra*) or (for St. Louis and south) Flowering Crab (*Pyrus floribunda*) 2 ...
9. Mock Orange (*Philadelphus coronarius*) 2 ...
10. Persian or Rouen Lilac (*Syringa Persica* or *Chinensis*)... 2 ...
11. Russian Olive *Eleagnus angustifolia* or (for St. Louis and south) Hercules Club (*Aralia spinosa*) 1 ...
12. Japanese Barberry (*Berberis Thunbergi*) 26 2
13. Bridal Wreath (*Spiraea Van Houttei*) 7 4
14. Weigela (*Diervilla rosea*).... 6 3½
15. Tartarian Honeysuckle (*Lonicera Tatarica*) 13 4
16. Snowberry (*Symphoricarpos racemosus*) 4 3
17. Sweetbrier Rose (*Rosa rubiginosa*) 2 ...
18. Japanese Rose (*Rosa rugosa*). 12 2½
19. Flowering Plum (*Prunus triloba*) 1 ...
20. Yellow Flowering Currant (*Ribes aureum*) or (for St. Louis and south) Five-leaved *Aralia* (*Aralia pentaphylla*). 2 4
21. Snow Garland (*Spiraea arguta*) 4 2½
22. Ash-leaved Spirea (*Sorbaria sorbifolia* or (for St. Louis and south) Weeping Forsythia (*Forsythia suspensa*). 8 3
23. Lemoine's Syringa (*Philadelphus Lemoinei*) or (for St. Louis and south) Common Barberry (*Berberis vulgaris*) 11 4
24. Indian Currant (*Symphoricarpos vulgaris*) 8 2
25. Cranberry (*Viburnum Opulus*) 8 4
26. Common Lilac (*Syringa vulgaris*) 5 4
27. White Lilac (*Syringa vulgaris alba*) 5 4
28. Hydrangea (*Hydrangea p. g.*)



- or (for St. Louis and south) Regel's Privet (*Ligustrum Regelianum*) 6 3
29. Siberian Dogwood (*Cornus Sibirica*) 6 4
30. Persian or Rouen Lilac (*Syringa Persica* or *Chinensis*)... 6 4
31. Peony in variety..... 7 2½
32. Larkspur in variety..... 15 1½
33. Hollyhock 7 2½
34. Giant Daisy 10 1½
35. Phlox in variety..... 10 1½
36. Bleeding Heart 5 1½
37. Japanese Bell Flower (*Platycodon*) 25 1
38. German Iris in variety..... 40 1
39. Pyrethrum roseum 15 1
40. Shasta Daisy 15 1
41. Lemon Lily 5 1½
42. Columbine in variety..... 20 1

43. Oriental Poppy	10	1½
44. Perennial Flax	10	1
45. Oswego Tea (Monarda).....	10	1
46. Engelmann's Woodbine (Am- pelopsis Engelmanni) or (St. Louis and south) Boston Ivy (Ampelopsis Veitchii)	6	...
47. Annuals—select own colors		
a. Dwarf Snapdragon		
b. Annual Pinks		
c. Annual Larkspur		
d. Dwarf Marigold		
e. Petunia Rosy Morn		
f. Scabiosa		
g. Zinnia		
h. Verbena		

Note.—The first number in a plant-bed indicates the kind of plant shown in the planting list. The second number indicates the quantity of that kind in the space designated. Circles represent individual plants, half-circles represent vines.

of windows and the kitchen is well arranged with the pantry making the communication between the kitchen and dining room. The range should have a hood over it, vented into a tile connection to carry off odors from the cooking. It is especially desirable in this case as the kitchen opens directly into the living room. The second floor is compact and well arranged.

The Landscape Scheme

Wyman P. Harper, Landscape Architect

The planting plan this month shows a very satisfactory method of arranging garden flowers where it is not feasible to have a formal flower garden. The great temptation to flower lovers is to place their favorites in the most conspicuous places in the yard, a purpose which is in itself highly laudable, but usually at the expense of that even more beautiful object, the lawn. The purpose of this plan and article is to show how one can have both lawn and garden, each enhancing the beauty of the other.

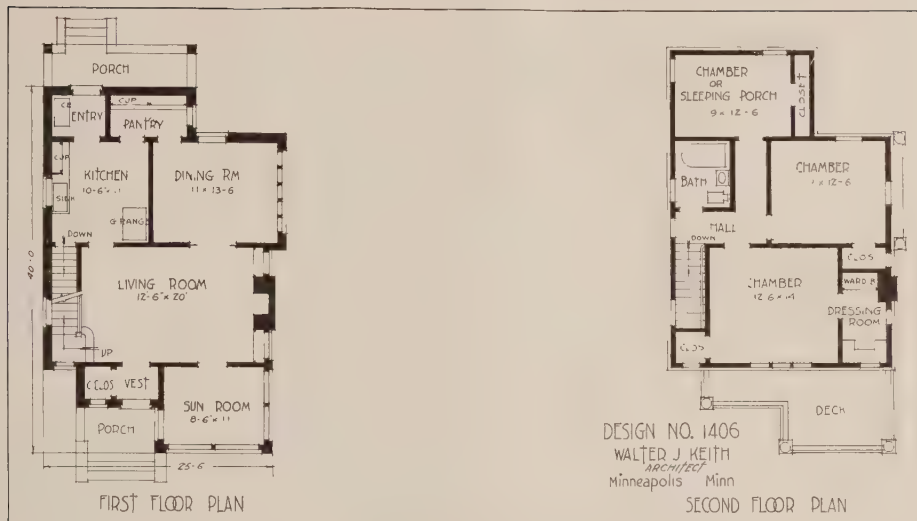
It should be noticed first of all that the flowers are all supplementary to the shrubbery. The shrubbery is the background without which the flowers would lose much of their ornamental value as growing objects. Incidentally, it may be noticed how well the house plan fits the

Estimate of Cost.	
Cost of Plants.	
7 large growing trees at \$2..	\$14.00
7 small growing trees at \$1..	7.00
151 shrubs and vines at \$0.25..	37.75
197 perennials (except Peonies) at \$0.15	29.55
7 Peonies at \$0.75	5.25
10 per cent additional for freight and packing charged extra	9.35
	\$102.90
Cost of Preparation of Soil.	
(Omitting cost of extra black soil and clay if needed)	
1 man digging 2,300 sq. ft. plant beds, 9 days, at \$2.....	\$18.00
1 man planting trees, shrubbery and flowers, 3 days, at \$2....	6.00
	24.00
	\$126.90

lot, leaving a proper proportion of lawn and planting between it and the property lines.

No difference is required in soil preparation between shrub and flower growing; the shrubbery beds are only made a little wider. After the shrubs have been planted and tamped and the rough work is all out of the way the flower beds may be raked and the flowers planted. It is taken for granted that the hardy flowers have been ordered from a nursery and delivered just as with shrubbery, and that they are to be planted similarly using a judicious amount of brains in the process. Most things may be placed well into the soil but the German Iris is an exception and should have its large root-like stem on the surface but with the roots themselves beneath. All need frequent and thorough watering, of course, and, what is the same thing, frequent cultivation, especially a stirring of the soil after every rain because that process helps to retain the moisture.

The method of planting annual flowers is not different, but the method of securing them is. All may be purchased direct from a florist if one wishes but there is much more fun in raising them from seed oneself. None of them should be sown in place but in a seed bed from which



they should be transplanted later, or, better, twice transplanted. Some of them, in fact, need to be started in a hot bed or cold frame in order to give any bloom before the summer wanes. To start them in the house is the same thing. But after they have reached some little size and vigor and the danger of frost is passed the annual flowers may be placed in their final position and from then on until frost comes count just the same as hardy flowers. The latter may be planted as early as the ground permits as a little frost does not hurt them especially as most of their growth is below ground for some time after planting.

The arrangement indicated, of putting the annuals in front, is purely one of convenience. Since they must be planted every year it is well to keep them together so as not to disturb the roots of the hardy perennials. A certain proportion of annuals are necessary in every garden for most of the perennials do not have a long season of bloom, however indispensable they may otherwise be, while the annuals, after they once start, bloom continually. Another reason for putting the annuals in front is that they always

remain attractive in appearance until the end of the season while some of the earlier flowering perennials may become weedy.

The flowers in the planting list are the hardiest and best of a long catalogue. Other kinds may be used for variety or in a larger garden but these are surely substantial. The earth for the last one hundred years has been searched for flowers in a wonderful way and our gardening at present is something that Queen Elizabeth or our early American fathers never dreamed of.

One point as to color. The flowers of shrubbery come so infrequently that we do not have to give much consideration to their color combinations. With annual and perennial flowers it is different, but it is generally safe to divide all flowers into two classes, those which are pink and those which are orange. The blues, whites and the light shades are apt to harmonize anywhere; it is the strong colors that need watching.

At least a few flowers should be planted with every shrubbery border, and as a rule they should be kept in one part of the yard and not placed promiscuously.

A Brick House with Shingled Gable Ends

EVEN when the eaves are low and overhang the first floor, a brick wall gives the house a sense of distinction, as the low eaves give it a sense of comfort. This house with its entrance recessed between the two projecting bays has been cleverly planned to utilize the

from the porch, yet is as convenient from the kitchen as from the living room. A fireplace in each of the living rooms, including the bathroom, gives an unusual arrangement yet it is not uneconomical of space. A fireplace in each sleeping room is a luxury that is very enticing. One



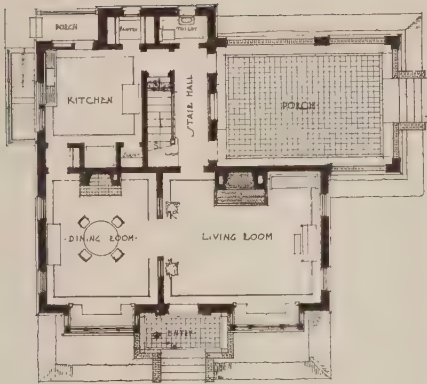
With entrance recessed between two bays.

space, and has almost a full story under the steep roof. The large open porch almost doubles the living space as it is accessible from the kitchen and may be used as dining as well as living porch. The arrangement of the stair hall gives a solution of the vexed problem of direct communication between the entrance and the second floor without going through the living rooms. The stair entrance is

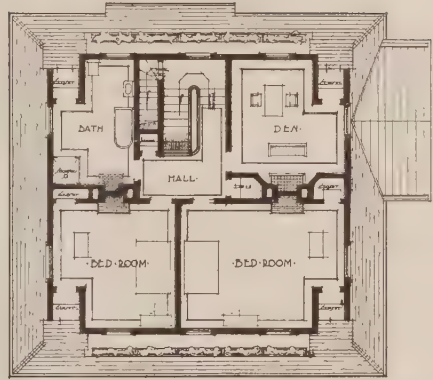
would be tempted to stay at home from business occasionally in order to enjoy it.

The dormers on the second floor are again cleverly arranged to give full headroom in the bedrooms. The steep roof is utilized still further to give room on the third floor with windows in the gable, and opening through the roof above the dormers.

The entrance is recessed, but opens



FIRST FLOOR PLAN.
SCALE - $\frac{1}{8}$ " = 1'-0"



SECOND FLOOR PLAN.
SCALE - $\frac{1}{8}$ " = 1'-0"

directly into the living room. Opposite the entrance is the fireplace. Both living and dining rooms are of good size. Each has a projecting bay of six windows, with a seat. Sliding doors throw the two rooms together. The kitchen is large, with a tiled recess for the range and a hood over. The same flue serves the range, the dining room fireplace and the two rooms on the second floor. The chimney in the living room takes care of the fur-

nace flue and two rooms on the second floor as well as the living room fireplace.

A china cupboard connects the dining room and the kitchen, with a kitchen closet on the opposite side. A store and refrigerator room is beside the rear porch and may have an outside ice door. A toilet room opens off the rear of the hall. The projecting eaves give a good place for flower boxes under second story windows.

A White and Red Color Scheme for a Stucco House

A ROUGH cast stucco exterior lends itself particularly well to the simple lines and hipped roof treatment shown in this design. The red roofs and brick steps and brick in the porch floor give an acceptable touch of color with the light tone of the walls.

The plan is of the central hall type so popular in the planning of the larger and more pretentious dwelling but not so often found in the modest home.

The main entrance is at the side shel-

tered by the overhang of the second story as well as by the extended porch roof. Beside the vestibule is the coat closet at one end of the hall, while opposite is an attractive stairway with a landing up three steps, from which opens a door communicating with the kitchen, making a combination service and main stairs. A good sized toilet room is placed under the stairs. The living room extends quite across the front of the house. Its massive brick fireplace fills the entire end of the



Rough cast stucco with red roofs and steps.

room, with high casement sash over the mantel shelf at each side. Bookcases are built in beside the fireplace. French doors open from the living room on to the sun porch. A similar treatment is used

between the hall and dining room. In the dining room is built in a combination buffet and china closet extending across the whole side of the room. There are drawers and cupboards under the serving



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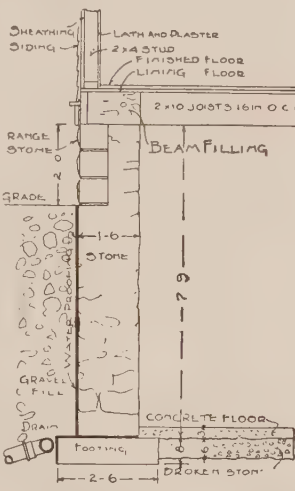
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(Fig. 6)
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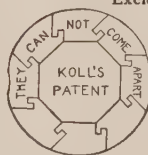
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Scope of the Work.

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Here is one thing you should know, however: There are very material differences in the formation and values of heartwood and sapwood. In some cases the heartwood is of the greatest value, in others the sapwood. Both may be employed to advantage, but where should they be used?

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Are you content to rely wholly on architect, contractor, dealer or your friends for such important knowledge?

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It carries with it a suggestion of intimate companionship that can be imparted to a room in no other way. It is an attraction that may be added to city, suburban or country home at very low cost and is one that pays.

Scene: A cold winter evening, a comfortable chair, a subdued light, a good story, a good cigar, perhaps a cigarette or box of chocolates.

A living room provided with a well designed fireplace nook is half furnished. Viewed from that angle it would prove an economy rather than an expense. It provides seats, lounge, davenport, bookcases, catch-alls, woodboxes and other conveniences, and, best of all, it gives all who enter the room a sense of satisfaction in having found one place that is all the heart can desire.

White Ash An Individual Wood.

White ash, a comparatively unsung member of the open-grain, hardwood fraternity, has artistic and practical merits of its own.

A tough, strong, more than ordinarily elastic wood, it has, too, the advantages of a whiter color than that of oak, and a smaller percentage of tannic acid—characteristics that make white ash peculiarly adaptable to some of the more elusive finishing effects produced with light-toned acid stains^a and contrasting paste fillers. For example, those cool, restful effects that, yet, have a distinctly frenchy atmosphere—silver gray acid stain combined with blue or green paste filler—these effects take with a far greater purity of tone on white ash than on oak.

The grain of ash, too, is a bit coarser, more pronounced, more diversified than that of oak, thus insuring the highest degree of artistic effectiveness from the filler—particularly on the slash sawn timber. In employing these out-of-the-ordinary effects, it is really worth while to overcome our prejudices in favor of quarter-sawn wood, for it's only on the slash grain that the full beauty of two-toned effects is revealed.

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SPLINTERS AND SHAVINGS

Constructing Flour Bins.



IN view of the fact that many industrious men, handy with hammer and saw, will be making some changes in "wife's" pantry, the following comments by a correspondent of the *Wood Worker* telling how flour bins should be built are likely to prove interesting:

Not very long ago we were given a job of building a case containing a number of flour bins for a bakery. We under-

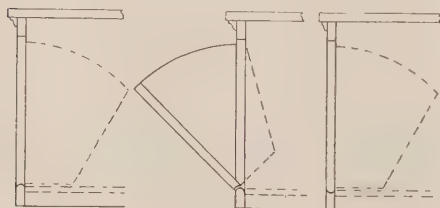


Fig. 1.

Fig. 2.

Fig. 3.

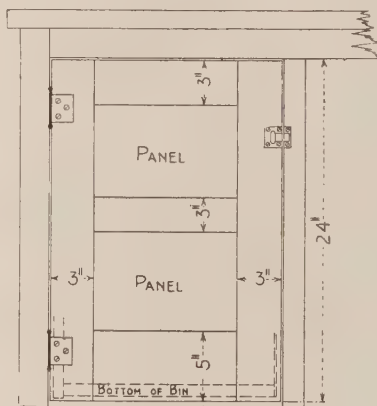
Details of construction.

stood the fact that a flour bin is so constructed that it tips out of the case. In laying this job out we figured that the proper way was to allow the front to extend about one-half inch below the bottom of bin and shape a concave on bottom end of front, this to set on the base rail, which we shaped a half-round on its upper edge, as shown in Fig. 1. This looks all right on paper, but we found that it would not work. The bin would tip out all right, but would not go back into its proper place.

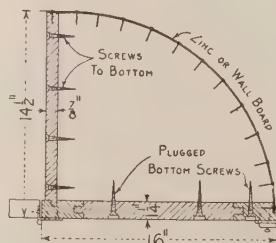
The trouble can be readily seen in Fig. 2. The bin, in tipping out, would ride up to the top of the half-round on the inside and down on the outside. We made up our minds that it was against the law of nature to expect a flour bin to ride down, and, in tipping back, to climb back up again, so we tore off the fronts, also the base.

The construction was changed by shaping a new base rail with a concave on its edge and a half-round on bottom end of front, as in Fig. 3.

There are three general types of flour bins among which the housewife may choose when having the fittings made for her kitchen. The tilting kind here shown have been largely used and are well known. A very simple bin is made like a very deep drawer, set on small wheels



A flour bin which opens like a door.



Elevation and end section of flour bin.

which rolls on the floor, but is fitted to its place as snugly as a drawer. It generally takes the full space under the moulding board and will hold a sack of flour. The details are here shown for a newer type which opens like a door and has found much favor with the housewife.

The parts on which the door is hinged must be solid and the door must be well made and hung with not smaller than

3x3-in. hinges. The dimensions here given will hold 50 lb. of flour and provide room for rolling pin, sifter, etc.

The circular part, as shown in the end view, can be made of zinc or tin, but the best material is wall board, which can be obtained at almost any lumber yard.

The North Front.

The American custom of platting streets so that they shall run with the points of the compass, and of setting a house so that one side of it faces due north, is responsible for many unfortunate conditions.

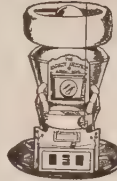
The north side of the street is coated with ice all winter, because the sidewalk is completely cut off from the sun's rays.

Rooms on the north side of a house never receive direct sunlight except for a few hours, morning and evening, at mid-summer. If the house be set only a few degrees from the direct points of the compass, north rooms will get a little sunlight either morning or evening.

A French architect, M. Augustin Rey, in an address before a society of civil engineers, says that the people must be aided in the battle for better health conditions by the planning of buildings and especially of tenements so that every nook and corner shall receive its share of the sun's rays for the greatest possible number of hours each day. He says: "Cities should be so planned that the direction of all the streets shall correspond to the sun's daily course in the heavens in order that the inhabitants may receive the maximum of light, light being the greatest microbe killer in existence."

He believes that the present system of small apartments in our cities must eventually give place to some well planned scheme for perhaps small, but airy dwellings for all classes of people.

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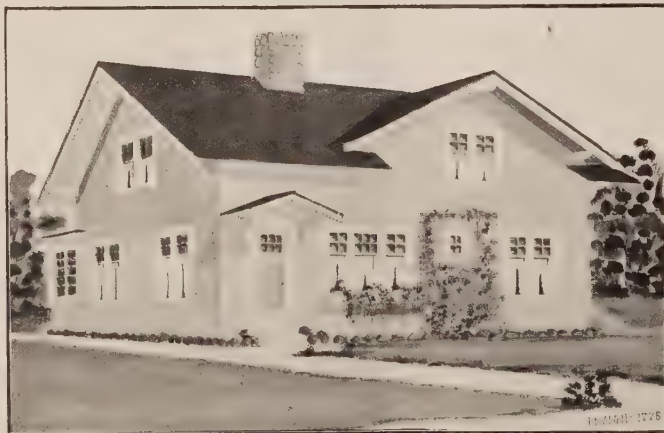
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New Booklets and Trade Notes



ALL Through the House with Upson Board" is the title of a new and beautiful booklet just issued by the Upson Company of Lockport, New York, manufacturers of Upson Processed Board.

This booklet will prove of unusual interest to those who plan to build or renovate. It shows photographs of a home completely Upsonized—from kitchen to garret. The effects secured are remarkably beautiful and wonderfully artistic. This booklet also shows a number of interesting tests which can easily be made in order to determine the quality of any wall board. A copy is sent along with a painted sample of Upson Processed Board upon receipt of 2c stamp to cover postage.

Wood finished in a satisfactory manner is the foundation of all pleasing interiors. This we are told in the foreword of an attractive booklet on the Proper Treatment for Floors, Woodwork and Furniture, issued by S. C. Johnson & Son, Racine, Wisconsin. The care of floors and of furniture is a subject on which many householders confess ignorance; nor is it an easy subject on which to obtain information. The booklet gives instructions for the use of the Johnson products, which are an acknowledged standard in their lines, as adapted to the needs of all parts of the house; new work or old. Even the automobile may be kept in condition at home.

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a corps of experts who give all questions on wood finishing prompt and careful attention. They request you to bring your wood finishing problems to them with no obligation whatever attached to the service.

A very up-to-date and practical book, "500 Plain Answers to Direct Questions on Hot Water, Vapor and Vacuum Heating," by Alfred G. King, has just been published by the Norman W. Henley Publishing Company, 132 Nassau St., New York City.

This book is cloth bound, contains 214 pages and 127 illustrations in 24 chapters; giving rules, data, tables and descriptive methods, together with much other detailed information of daily practical use to those engaged in or interested in the various methods of heating.

Five hundred direct questions are answered in simple language, among which are, "Why should a chimney be built round or square?" "What are some of the most frequent causes of trouble or failure on the part of the flue to operate properly?" "What is accelerated hot water heating?" "What is a non-mechanical system of vacuum heating?" "What is the thermostatic principle?" The book would be very valuable to those preparing for examination, and can be obtained from the publisher for \$1.50.

To build a fire-proof floor with a large span between supports, which shall be neither cumbersome, heavy nor expensive, is one of the progressive problems of construction. Each season new solutions are offered, with advantages over those used before. The Trussed Concrete Steel Company, of Youngstown Ohio, have issued a fully illustrated pamphlet showing the Steel Floretype Construction, which they believe marks the greatest advance yet made in fire-proof floor construction. The "Floertype" is a steel tile 6 to 12 inches in depth which comes in sheets of standard lengths, approximately 20 inches wide. The crowns are stiffened by a deep rib so that it will readily carry the weight of the concrete superimposed upon it. The construction is elastic and light, sound-proof, yet exceedingly strong. Its light weight reduces freight rates.

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table and cupboards on each side with doors filled with glass, either leaded or set in copper bars, to match the window between.

The kitchen is very complete with its built-in work table, flour bin, a radiator for plate warmer, cupboard for table leaves, clothes chute, etc. The refrigerator is iced from the entrance at grade level. There is a high cupboard over the refrigerator, with the cupboard for table leaves beside it.

On the second floor are three airy chambers beside a fourth filled with windows serving as a sleeping porch. There is a small balcony to be used for airing bedding. Each room has a closet, while the owner's chamber has two. A linen closet is provided off the hall. A stair leads to a well ventilated attic. In the

bathroom is a built-in medicine cabinet, clothes chute and broom closet.

The basement is very complete and convenient in its arrangement. The plans provide for a light laundry, furnace room, vegetable and fuel rooms.

The first floor is finished in quarter-sawn white oak with plain oak floors; the other floors are of maple, with tile in the bathroom. The second floor is finished in pine for white enamel, with birch doors stained mahogany.

The exterior walls are frame with white cement plaster over galvanized metal lath. If desired, on account of the simple lines, hollow tile might be substituted at a small additional cost. The roof shingles are stained a deep red. Porch floor and steps are of brick.

Boulders for a Bungalow



Imagine it with roses clambering over the stone work.

Bungalowcraft Co., Archts.

THIS bungalow was scarcely completed, so the photographer tells us when this picture was taken, and he suggests that we imagine what its appearance will be when it is ivy-clad, with climbing roses clambering over the rough stone work of the terrace and chimney.

The cedar shingles of the outside walls and roof, with their brown stain, make a good setting for cobble stones, and attract the attention of the passerby as good cobble stone work always does. The covered part of the front porch is 8 feet by 16 feet and an 8-foot wide, open

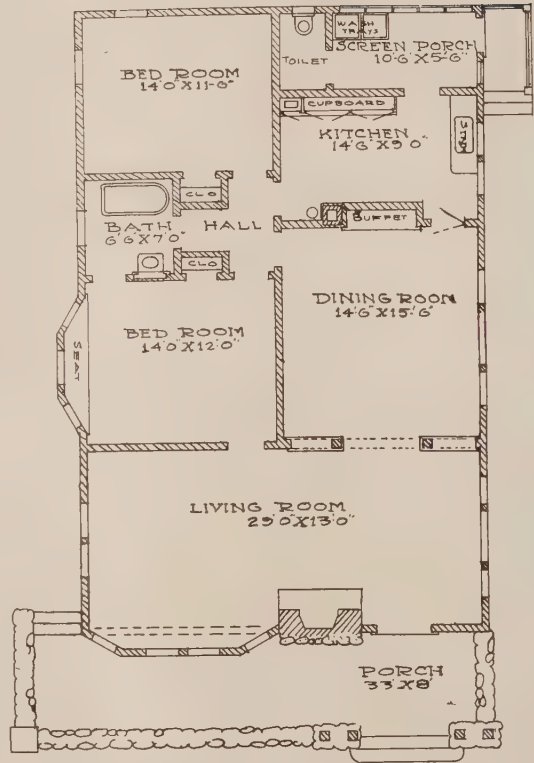
terrace extends beyond the house with steps leading back as will be seen on the floor plan shown.

It is not a large house (30 feet by 54 feet, over all), but it contains a surprising amount of well-arranged room space. The floor plan will repay careful study.

The large stone fireplace divides the living room irregularly. Persons may pass through the entrance end of the room without disturbing those who may be sitting in the great bay at the other end of the room, yet both may have the cheer of the open fire. The placing of the posts and of the fireplace are such that the living room ceiling may be beamed very correctly and effectively if desired.

When timber beams may be left exposed in the actual construction of the ceiling, it is wonderfully effective. In a case like this they are at least logical. Deep cross beams between the posts and the fireplace may be used in order to carry the ceiling of the room, which may be plastered between the beams, and the beams spaced regularly the length of the room. False box beams may be set on the ceiling after plastering, if desired.

Note is made of the "colonnade opening" with bookcases built in on either side, between the living and dining rooms, and of the built-in buffet on the opposite side of the dining room. The kitchen is well supplied with cupboards. The sink is well lighted. Stationary wash trays are set on the rear porch, and a toilet opens off this porch. Note is made that this plan has also been arranged with the toilet placed in a larger bathroom which includes the closet to the rear bed-



room and for the bedroom a larger closet where the toilet is now shown.

It is always difficult if not dangerous to talk about costs and prices except under definite conditions. But the architect tells us that this house has been built in California, with pine trim, stained and finished in living and dining rooms, enameled in bedrooms and bathroom, and the other rooms painted, for \$1,650.

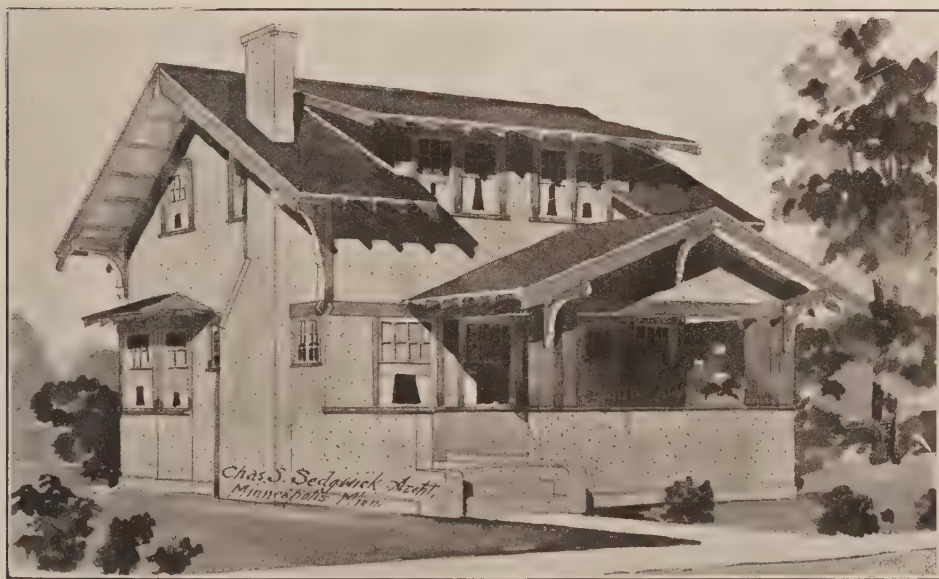
It was well built of good material throughout, standard plumbing, electric wiring and fixtures, screens, etc., but there were no "extras" such as hardwood floors. In Iowa, with hardwood floors, cellar under rear half, warm construction and furnace it cost \$2,560.

An Attractive Home of Modest Size

IN building a home three things are necessary: it must satisfy the people who are to live in it; it must be practicable to build; and it must also satisfy certain financial relations between expenditure and result. In general, people want about the same thing, but they always want it in a different way. For

platted, if the house is to have space and sunshine on both sides. An east front would give the best sunshine for this arrangement of rooms, allowing both living and dining rooms a south exposure.

The entrance vestibule has the needful coat closet. The stairs are wide and easy. The communication between the kitchen



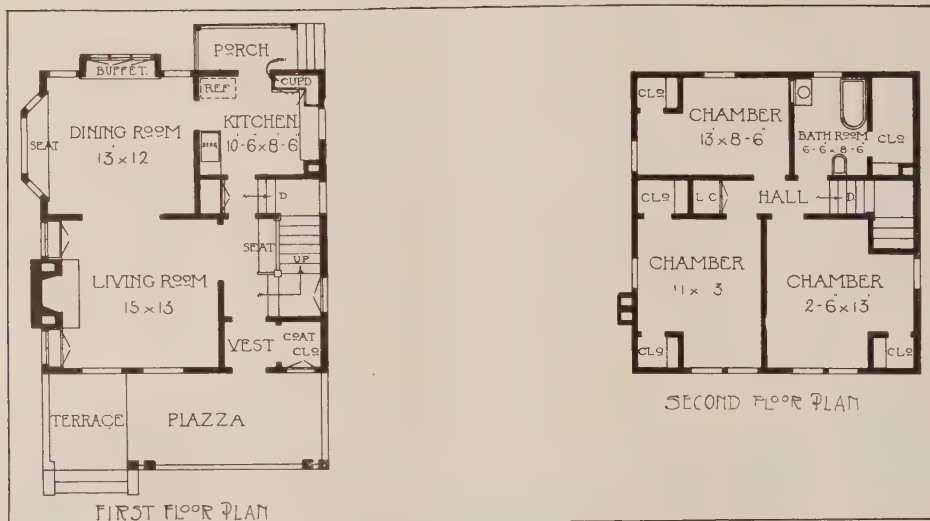
The house is narrow enough to give sunshine on both sides.

C. S. Sedgwick, Archt.

that reason nothing is so fascinating to the average person, whether an intentionally prospective builder or not, as the study of the plans for somebody's home.

Stucco solves the problem of the exterior treatment of the house in a very satisfactory way for it is attractive and good, and is not expensive. A six or seven room house fills the need of the small family. Here is shown a plan which comes within the twenty-six feet often required by the narrow lot so generally

and the front door is direct, allowing the maid to answer the door without entering the living room, a matter very often overlooked in arranging the floor plan. Fifteen feet by thirteen given a very satisfactory size for a living room. The fireplace has an outside chimney, and the chimney breast extends into the room only the depth of the bookcases which flank it on either side. With windows over the bookcases, the end of the room is very attractive. The dining room has



a projecting bay window with a seat, also a built-in buffet with drawers and cupboards under and high windows above the serving table. The kitchen is well arranged with sink on one side and cupboards and a long work shelf or serving table on the other. There is a separate flue for the range, which will stand conveniently near the serving table. It is a good idea to have the table near the range zinc-covered, so that hot dishes and pots may be set on it at the convenience of the cook. The refrigerator is so placed that it may have an outside ice door if desired, and be iced from the rear porch.

There is a full basement under the house, with accommodations for the heating plant and laundry. The foundation walls are of concrete, with cement base at the grade line.

The main floor may be finished in birch throughout if desired, with birch floors, or oak finish may be used in the main part of the house and birch be used only for the kitchen.

On the second floor are three chambers, with closets under the roof, one chamber

being blessed with two closets. There is a good linen closet opening from the hall and also a closet from the bathroom. The interior woodwork of the second floor is designed for hard pine with a natural finish and birch floors.

The roofs are broken by dormers, front and rear, and all are shingled. A memorandum for exterior treatment suggests that the shingles be stained a rich reddish brown color, and that all of the outside trimmings, cornices, casings, etc., be given a brown creosote stain. Paint all of the outside sash white and give the cement wall a light cream tint, selecting tones to bring all together in an harmonious whole. The cornices have a wide overhang and the gables have virge board and brackets with the rafters exposed on the under side. A very good effect may be given by painting the soffit of the cornices a light cream color with the outlooking rafters stained brown.

According to the architect's estimate this house may be built for a sum varying from \$3,200 to \$3,800, exclusive of heating and plumbing.

An Attractive Northern Bungalow



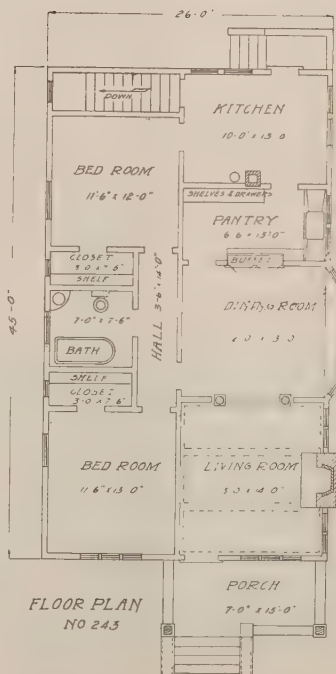
With white trim and cornices.

Jud Yoho, Archt.

THE white trim and cornice with its brackets and rafter ends, emphasizes the irregular lines of the roof, and gives an unusual note to this bungalow planned to meet the conditions of a cold climate.

Designed for a deep, narrow lot, the rooms are all carefully proportioned, more attention being paid to pantry and closet space than is usual in small homes.

The arrangement of the kitchen and pantry has some features of especial advantage. The chief uses for a sink are the preparation of vegetables, the washing of dishes, and the washing



of cooking utensils. A sink in the pantry is very desirable, because dishes brought from the dining room may be washed and put directly into the cupboards without being taken to the kitchen. But for vegetables and cooking utensils it is more convenient to have the running water in the kitchen. Generally the sink is placed without question in the kitchen. In this case it is placed in the pantry with full drain boards beside it. The kitchen chimney is beside the pantry door so the sink will be more convenient to the range than if it were on the opposite side.

The bedrooms at either corner of the house are of good size and the windows are so located that the bed and other furniture can be placed in different locations and at each moving make the room look larger. Did you ever try this?

The living qualities of the bedrooms are increased by the size of the closets, which are in reality small dressing rooms, each having a window and ample length. The central hall giving access from the bedrooms and bathroom to the rest of the house is an especially commendable feature.

The living room off the substantial-looking porch has beam ceiling and a broad, handsome, brick fireplace. The

entrance from this room to the dining room is through an artistic opening which gives an idea of additional space in each of the rooms it separates, and forms the frame for the attractive buffet on the opposite wall of the dining room. The entire outside wall of the latter room juts out, forming an immense bay with six lights and a ledge within for flowers, or if preferred, for a window seat. Whichever is desired for this corner, the light from these huge windows is unsurpassed.

The cellar stairway near the outside door is a convenience that any housewife will appreciate and the large well lighted basement provides space for furnace, fuel rooms and laundry.

Homes of Individuality

Selected by W. J. Keith, Architect

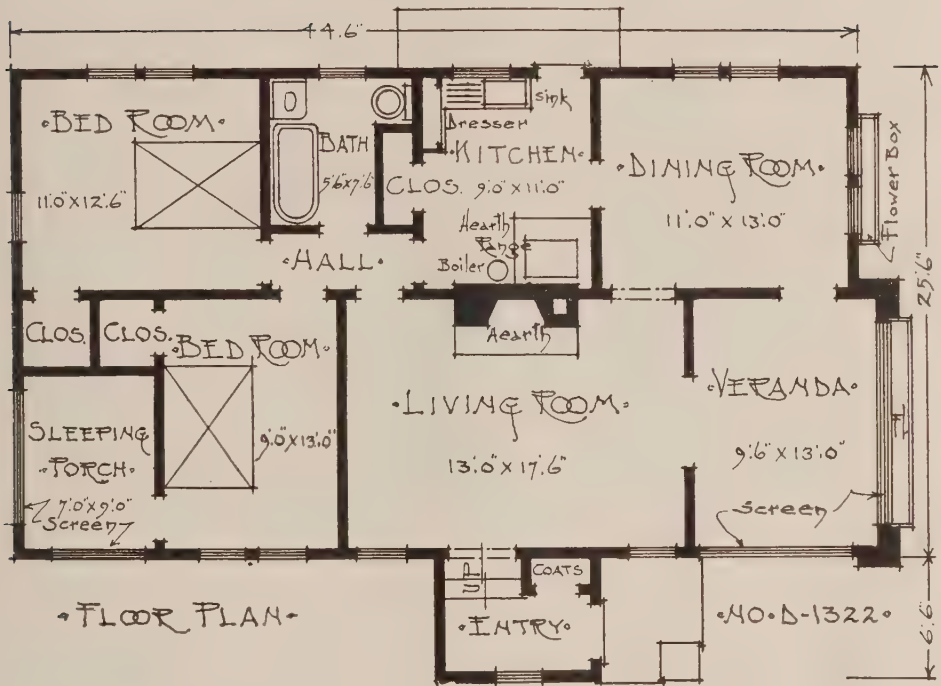
A Bungalow of Shingles and Stucco

PERHAPS no combination is more generally pleasing than that of stucco and shingles. Built on the low lines which have become so popular since their general adoption in California, this

bungalow is at the same time very well planned. It is extremely livable in its arrangement, because the housewife may keep a supervision over the different parts of the house with so few steps. She can be "at home" in the living room, yet know



Built on the low lines so popular just now.



just what is going on in the kitchen at the same time.

The entrance is from the ground level, with two steps into the living room. One end of the house is devoted to the living rooms while the sleeping rooms are more or less secluded in the other end of the house, and include a sleeping porch. Closets in each room are well arranged. A tiny hall communicates with the sleeping rooms and bathroom and separates them from the living part of the house.

The exterior is no less attractive than the interior. Stucco is carried from the ground up to the sills of the windows, and the walls are shingled from the sills up to the under side of the roof, and stained a dark brown, as is all of the timber work. The stucco piers at the corners of the porch carried up to the top of the window openings receive the brackets for the roof and break the dark frieze in which the windows are placed.

A Color Scheme of White and Green

The simplicity and the dignity which the colonial builders succeeded in instilling into their buildings is often lacking in our modern, restless time. It is entirely independent of the size or structure of the house.

The sturdy posts of the long veranda, together with the wide white siding and green blinds, give a charming simplicity to this design which relates it to colonial days. The center balcony is entirely reasonable, though unusual and the flower boxes under the second story windows add interest.

The floor plan is carefully studied giving a long living room on one side of the entrance hall with fireplace and seats on one side and a good wall space opposite. The porches on the front and rear both give access from the living room. The dining room and kitchen are well arranged on the other side of the house, with good

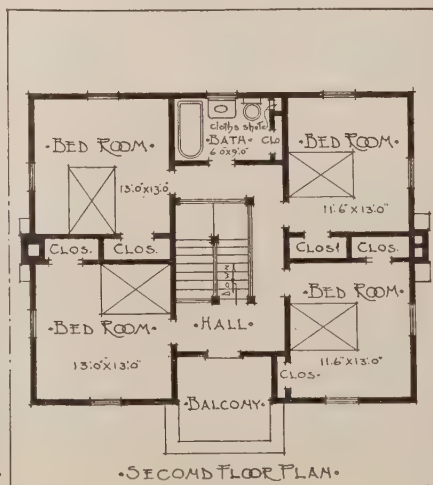
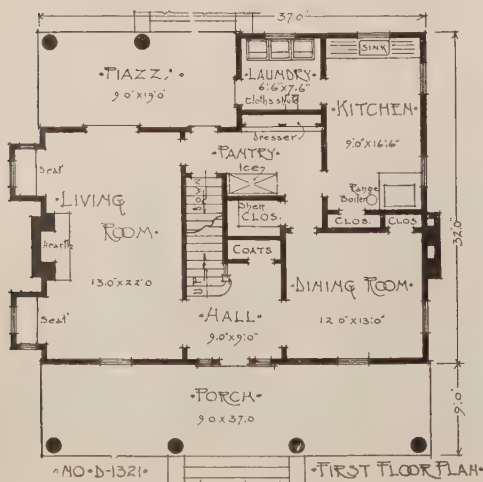


A house with simple dignity.

cupboard and closet space. The refrigerator is near the piazza door and may be iced without trampling through the house. The laundry is placed beside the kitchen on the ground floor, instead of in the basement, making a convenient entry to the kitchen when the tubs are not in use.

There is a full basement under the main part of the house. There is a coat closet

beside the stairs, convenient to the entrance. On the second floor each of the four rooms get breeze and light from two directions and are of fair size. The sweep of the roof makes the porches a part of the house, and at the same time gives more room on the second floor. It is a most attractive yet economical arrangement.



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The Prevalence of Violet

IT IS many long years since lavender and its kindred shades have been used for decorative purposes. Indeed their popularity is very recent. Time was when one occasionally saw a cream-colored wall paper spotted with small bunches of violets; pretty enough in itself but rather unthinkable on the walls of a room, but textiles in violet tones were quite unattainable. With the advent and great popularity of white enameled furniture one began to see cretonnes with designs of lavender flowers which looked very well indeed, with the shining bedsteads and chests of drawers. The harmonious association of some shades of green with lavender was a later discovery, and it was not long until it was found that a combination of white and lilac and clear yellow was a pleasant thing. And so we have gone on adding to the possibilities of its use until violet or lavender is quite the most popular of the delicate colors.

There is such a thing as using too much lavender. I do not think a room of unrelieved lavender is often successful. If by chance it is, it is one in which no expense has been spared, in which the materials used are so fine that they are very beautiful in themselves, quite independently of their surroundings. And another point is that lavender is not a good color in cheap materials. It is horrible on a distempered wall and it looks very common indeed when applied to cheap, plain textured colors. The quality of the light must be considered, as lavender is an essentially cold color needing sun-

shine, or at least a light suffused with sunshine, such as one gets in southeast or west rooms. Moreover it is much affected by artificial light and only those tones should be chosen which have a suggestion of red and do not turn to a dingy stone color by gas light.

In working out a violet scheme it is best to use a neutral tinted wall, although pattern may be introduced in the way of a frieze or border. There are quite a number of papers with very small all-over designs in a yellowish gray, putty color and shades a little darker, which are admirable with violet furnishings. One of them is marked off into small diamonds with a tiny ribbon in the darker tone, with knots at the points of intersection, and into it comes a two-inch border into which violet is introduced, this border to be carried around under the picture moulding. There are a number of others of the same sort, including two-toned stripes in various widths. When it comes to special patterns, it always seems rather hopeless to specify, but I have seen a very shadowy gray foliage paper with garlands of flowers in pastel shades, faint rose, violet and greenish white, which would be excellent for an upper third treatment, above a plain ingrain, papered or distempered wall, with grayish white woodwork. The ordinary, warm gray, foliage paper, which is used so much for halls is also a good background for violet, and its pattern is so little defined that it is quite possible to use a figured material in association with it. While a white wall is a very good

background for most delicate color schemes, it is not often advisable for use with violet, as it is too cold. If the warm gray is, for any reason, inadvisable, an ivory or deep cream wall is a good choice.

The floor covering is always a problem with a violet scheme. The Oriental rug never seems the right thing, though I have seen a brown Chinese wool rug used with good effect. For the average room with gray walls a gray homespun rug answers, although it is hardly suitable for a handsome room. There are a good many purple rugs in the market, but as a rule their tone is blue rather than red and they do not harmonize with carefully chosen furnishings. It is possible to get a plain velvet pile carpet in deep plum color which is a very good investment. A Wilton carpet in a very small pattern, in two tones of warm gray is good rug material, and of course if the lavender tones are combined with green a green rug or carpet is quite in order. For a bedroom it is quite possible to have a rag rug made to order in the desired tone of violet, the cost being approximately seventy-five cents a square yard. When a bedroom is in question it is as well to use a plain white straw matting for the floor covering with plain violet rugs of small size at different places. "Thread and thrums" rugs, very closely woven of woolen threads, can be ordered in any shade with darker stripes at the ends, and are very serviceable. Another possibility is having a very high colored moquette or velvet rug dyed violet. It is often possible to find such carpets in delicate gray with pale tinted flowers trailing over them, in second-hand shops, and if they are not worn, only faded or soiled, they are well worth buying, as they dye beautifully. The cost is about thirty-five cents a running yard, but the shrinkage is considerable and must be allowed for. If the violet room has much brown wood in it, a medium brown, not too yellow, is a good choice for a rug. When choosing it, bear in mind the tone of the brown Chinese wool rugs and you cannot go far astray.

Furniture for the Violet Room.

Nut brown oak, or the darker tone called Jacobean, which is a little lighter on the projecting surfaces, is the best natural wood to use with violet, which is



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(93)

seldom happy with mahogany. For instance you may have a room with oak woodwork, brownish cream walls, a brown rug, and curtains and the covering of a big chair of violet Liberty velvet. Then the rest of the furniture could be of brown oak, the chairs and a settee rush seated, with some loose cushions of a brocade or a tapestry in several tones of violet. A big fern in a violet pot, desk furnishings of violet leather, perhaps a work bag of violet brocade, china painted with violets for the tea tray will help to accentuate the violet note while everything else is brown, the pictures being brown toned photographs in brown or black frames, a bit of black now and then helping wonderfully.

Enamel and Rush.

The violet room, I suppose, is apt to be a small one, usually a bedroom, or a small sitting room, although the color can be most effectively used for a drawing room, and is not inconceivable as a setting for a collection of pewter in a dining room.

But a violet bedroom can be lovely, given a cretonne of good coloring and effective design. Here the violet rag rug will be quite at home also the small patterned, warm gray wall paper of which I have already spoken. The furniture may be violet enamel, a fairly deep tone, although by no means purple. It is possible to have too much of an unusual thing like violet enamel and it is well to omit the bureau or chiffonier and have only a dressing table and bed of enamel, possibly a table, buying them in the wood and choosing pieces of rather light construction, a bedstead with spindled head and footboard. A very good bed-

room table can be picked up in department stores for a dollar or a little more. It has a square top and legs that spread outward, and inclose an under shelf. Scrubbing it well with some sort of washing powder will work off the varnish and make it ready for the coats of paint and enamel.

Two coats of paint and two of enamel, using the best quality procurable of each, will give an admirable surface. Even if one puts on the paint oneself it is worth while to have a professional put on the enamel. This and the paint will probably have to be mixed to order and must be tested by artificial light.

For the rest of the furniture have one stuffed chair, and nothing is comparable to the high-backed, winged, grandfather's chair. Then you will want smaller chairs of gray wicker, two side chairs and an arm chair. Be liberal with the cretonne or printed linen, whichever you choose. Use it for sill length curtains over thin white ones, for a bedspread, for covering the big chair, for loose cushions for the wicker ones and for a scarf for the table. Use a lace cover for the dressing table through which the violet enamel will show. A pair of gilt or brass candlesticks with violet candles will give a high light to the mantel piece and a mirror in a gilt frame should hang above it, unless you fancy a bas-relief in ivory tinted plaster. Occasionally one runs across ornaments or vases in violet tones but not often, though there is always the chance.

Violet and Green.

Sometimes one finds a cretonne which combines violet and green admirably. Such a cretonne looks well with green painted furniture or with weathered green oak. In a sunny room the wall might be a light, low toned green, in a different light a warm gray or not too golden tan. The rug could be a deeper green than the furniture and the cretonne, used just as in the other room suggested. There is a much wider choice for all the small things of a room when green is combined with violet than when it is used by itself, and the combination is a very charming one for which we have the authority of Dame Nature.



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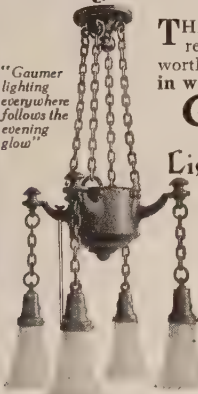
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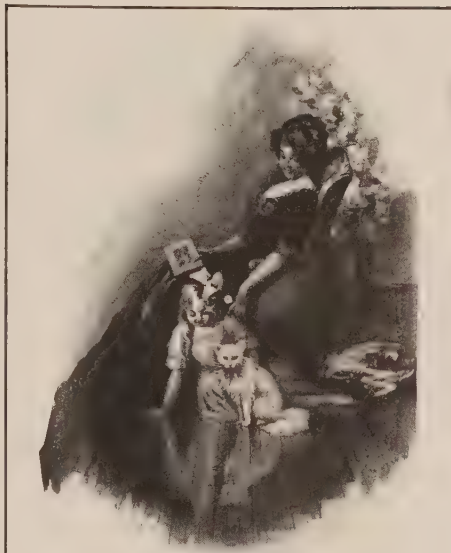


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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

EDITOR'S NOTE.—The courtesies of our Correspondence Department are extended to all readers of KEITH'S MAGAZINE. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

To Remove Old Paper.

W. L. McM.—Although having received but two numbers of your magazine, I am more than interested in the way you treat of homes in building and decoration.

I am taking the liberty of asking for information as regards interior decoration in an old home about to be remodeled. Is there any way in which wall paper may be removed without discoloring the wall so as to show spots when tints or paints are applied?

At what distance from ceiling should plate rail be placed?

Should a dropped ceiling be used with plate rail for either tints or paper?

Ans.—We do not think you would find any difficulty in removing the old paper and preparing the walls for either tints or paint. The old paper must first be scraped off, then the walls thoroughly washed, so as to take off the size down to the plaster. It is not probable any stains have penetrated the size.

A plate rail should be at least 5 ft. from the floor. The ceiling should not drop the angle, as that makes too many divisions. The ceiling tint can, however, be carried down to the plate rail if desired. As for instance, if brown were used below the plate rail, then a dull yellow or deep cream could be used on wall above and on ceiling.

A Young Girl's Room.

M. E. McC.—Enclosed is a floor plan of a girl's room. I would like a suggestion as to decorating the walls. The furniture is of birch and the beds are white enameled. The wall paper is yellow, striped with small pink flowers between and has a pink rose border at the top. The woodwork is white enameled and the room is light. At present it is decor-

ated with pennants, but I am tired of this arrangement and would like something new.

Ans.—We sympathize with "a girl of sixteen" in her wish for a pretty room. One trouble with your room is, the walls are too negative for your furniture; then, it is a small room for two beds—one a full size. It would help, if you could change the full bed for a single one.

You do not say whether the dresser, etc., are birch natural or stained mahogany—nor what sort of a floor or rug you have. These are important points.

If the dresser, etc., is mahogany stained, then leave the white beds as they are, and paint the other pieces white, three coats. Don't be startled at this—the furniture is probably not very choice. Then tint the wall a deep pink—you can kalsomine right over the paper if it is on good and tight all over. The pattern of the paper may show very indistinctly, but it will be all the better in plain, deep pink. White ceiling and white woodwork. Then put rose flowered curtains at the windows, and make cushions for your chairs of rose flowered cretonne; also cover a waist box with it. Paint the radiator the color of the wall. You must either have a rug with rose border, or you could have an old rug dyed deep pink—first discharging the old color. This will give you a dainty, pretty room with small expense.

Paper and Upholstery.

E. M. W.—"I have read with great interest your suggestions about papering and house furnishing, and am going to ask your aid to decide on papering, hangings and rugs for my colonial house."

Ans.—In your colonial house in Virginia the colonial feeling should prevail in the furnishing. There are now many



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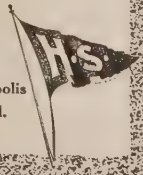
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fine reproductions of handsome old papers to be had, and this season the dealers are showing the old rich effects in "flock" or embossed velvets, so long banished from our walls. For your broad center hall with white woodwork, this style of paper in a rich deep crimson would be most effective. The sitting room on left would be agreeable in a soft lichen green, and the northeast dining room in old gold and cream. We would have rug in brown, cream and some deep old red or rose, and curtains of old gold. Sun porch with pale, golden ecru wall. The mahogany furniture will be lovely against this background. For the sitting room furniture you can have the old-fashioned sofa upholstered in a small figured tapestry, or a mohair in the pale green or rose. Some chairs could have seats of plain lichen green velvet. The ottoman may be done in either.

For North-East Rooms.

J. A. D.—We are going to redecorate the house into which we are moving. The ceilings are rather low, and the woodwork is white. The living room is dark. I have two rugs, a blue and white one and another in tans, blue, Oriental red and a good deal of black. The living room furniture is fumed oak and wicker, dining room oak, and bedroom mahogany. Would it be possible to have the woodwork made a blue green and use either a blue or green color scheme.

Ans.—In reply to your request for advice, we do not think a blue and green scheme would be a good choice for your living and dining room facing N. and E. It would be especially bad in the living room, which is, as you say, dark. Also we advise repainting the woodwork old ivory, rather than white—certainly not blue or green in these two rooms. We would use the tan, blue and red rug in dining room, with a soft tan wall and a frieze decoration in the coloring of the rug. Tan living room wall and old gold grass-cloth paper, with new rug in brown and cream and over-draperies of old gold sunfast at the windows. Cream ceiling. In bedroom the blue and white rug, blue Chambray wall with banding at top of pink roses.

We feel sure the living room in the tones suggested will give you great pleasure.

To Grain Woodwork?

B. H. S.—I am taking your offer of help in the magazine, and ask for information in the interior painting of my home. We are remodeling a one-story cottage. The reception hall and the library are to be thrown together by a colonnade with a similar opening to the dining room. The woodwork has been enameled white and needs repainting. The columns are to be put in, so are not painted. Should they be painted white? The furniture in library, will be mahogany, the walls I thought a mottled greenish grey. The dining room furniture is a dark oak. We live in a small southern town where the workmanship is medium and am afraid to trust the graining of woodwork.

Ans.—We are glad to be of service to you regarding your interior. Do not for a moment think of graining pine woodwork. The columns must be the same as the other woodwork, and we should use deep ivory throughout those rooms. You can have the doors mahogany stained, and that with color in the furnishings, rugs, draperies, etc., will be a sufficient relief. The two doors in dining room can have oak stain on the dining room side to match the furniture.

The greenish gray you speak of for library walls^a will be very cold and gloomy. The only way you can work in your green hangings if you have them on hand is to have very light, cheerful walls. With the ivory woodwork and mahogany, old gold walls would be delightful in library, pale soft tan in living room. There is a very charming paper for a cottage dining room—woody-gray foliage with hints of rose through it, which would be nice in that east room. An inverted porcelain bowl for electric light over the table. A ceiling shower in living room, also two side brackets, and side brackets only in library, one for table lamp can come up through the floor. In library, have amber colored glass, but in living room opalescent white. You must paint the floors—dark green will be good, especially when the rug is green. When you lay oak floors over them you can stain or have natural, as you prefer.



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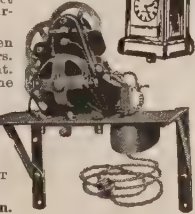
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The Mosquito, the Fly and the Closed Screen

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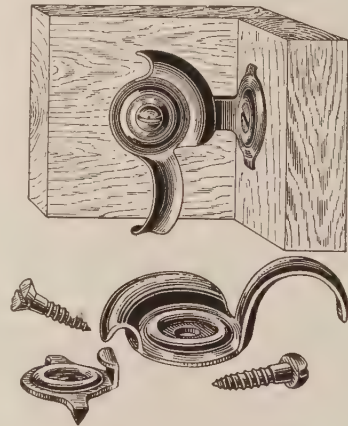


Fig. "B."

doom was sealed, but it will be long before his final passing. Swamps have been drained in some of the malarial regions. Breeding places have been covered with oil in places where the fevers have raged hitherto, but the farm pond, the marshes on the outskirts of the village, the pools and ravines are still prolific, especially during a season of heavy rains. If the enemies of the mosquito in any community will band together and devote a considerable amount of time and study to the problem in its local conditions, there is reason to believe that they may be freed of the pest.

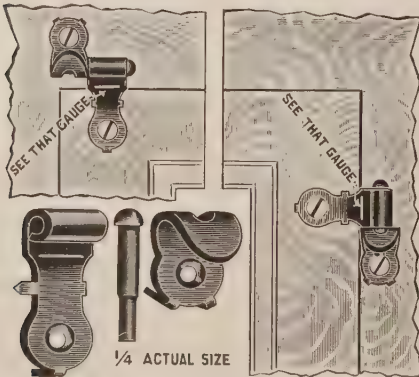


Fig. "A."

The common house fly is perhaps scarcely less of a pest than the mosquito. The housewife and the mother has learned that the friendly fly is not only unclean but dangerous, and that it is a particular menace to the small child. The slogan "Swat the fly" which was proclaimed last year with considerable effect is still in force. Considering the vast hordes of these little pests, the taking off of the individual insects seems not only a hopeless but a useless task until we realize that

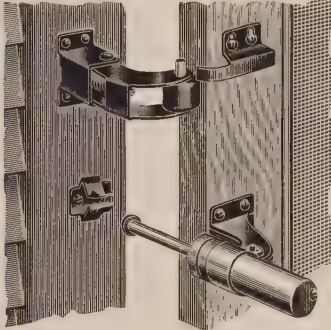


Fig. "C."

early in the fly season they are comparatively few. At that time it would be possible to kill many or most of them. Scientists tell us that the fly lives twelve days before laying any eggs; that the number of eggs laid by one fly is legion. If the fly comes under the swatter during the first ten days of its existence it becomes unnecessary to kill dozens a few weeks later.

Regardless of science and etymology both the mosquito and the fly will remain with us for a few seasons at least. Now that we know them and their ways they are vastly more repugnant to us than was the "little harmless fly" of a few years ago.

It is a very difficult matter to keep screens sufficiently tight to exclude either flies or mosquitos. Yet screens are our only final defense against them. Despite the most scrupulous care of the housewife there will be an occasional fly. A

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screen door which fits snugly one season will stick after the rains of the next spring, and refuse to close tightly, or it will rebound and stand slightly ajar, leaving a crack sufficiently wide for flies to enter. Once inside the house they seem to understand that they are safe if they gather in the sunshine on the screen, back of the sash; that they can play "fox and

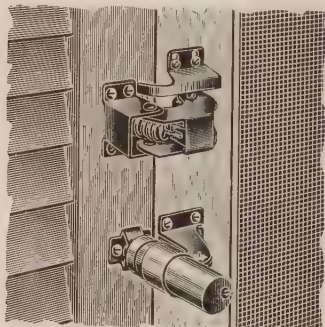


Fig. "D."

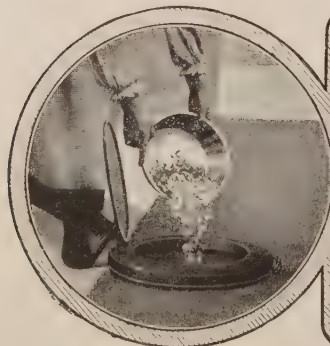
geese" with the swatter and get away almost every time. It is their place of refuge when driven from the table, from the fruit, or from the baby.

There are several screen devices which may prove a boon to the housewife in such conditions. There are a number of simple hinges on the market costing only a few cents per pair, which allow the screen to be lifted off and removed for the winter, or to hinge open if desired.

The cut "A" shows one type of these hangers which may be placed either at the top of the screen or at the side, allowing it to swing accordingly. Flies may be easily driven from a screen hinged at the side and swinging out. A catch holds the screen securely when closed. Such a combination of hinge and hanger also simplifies the task of taking off the screens to wash windows during the summer as well as in removing them for the winter.

There are other devices which control the screen door when it closes, prevent its slamming, and which catch and hold it tightly closed. There are many types of such devices, elaborate or simple, operating on many principles. Cut "C" shows a screen door controller lately put on the market and for which the patents are still pending. This device consists of a spring catch that closes the door and holds it tight shut, and a miniature plunger that stops the slam. The plunger works with compressed air on the principle of a bicycle pump, and has a simple regulator, for different strength spring hinges. There is nothing to get out of order. The door catch is an ingenious, patented spring device that automatically catches the door when closing and holds it tight against the jamb. It tends to keep a door from warping or to straighten a warped door. Cut "D" shows the same combination of devices holding the door closed.

NOTE—We are indebted to the Watrous-Acme Mfg. Co. and the Dunn Mfg. Co. for the illustrations used in this article.



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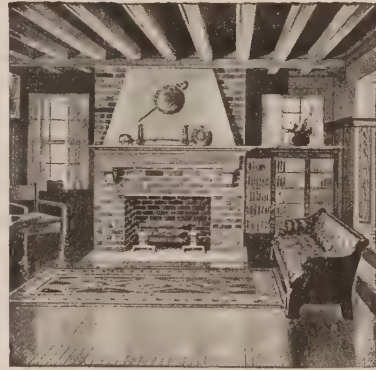
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200 VIEWS



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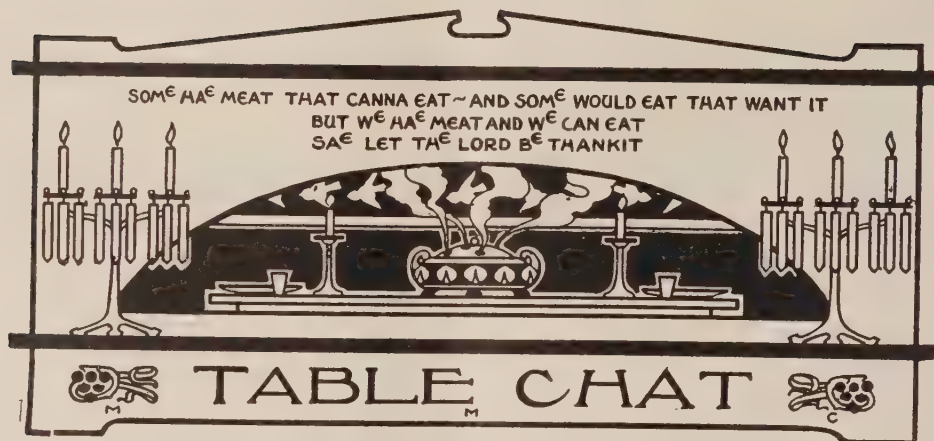
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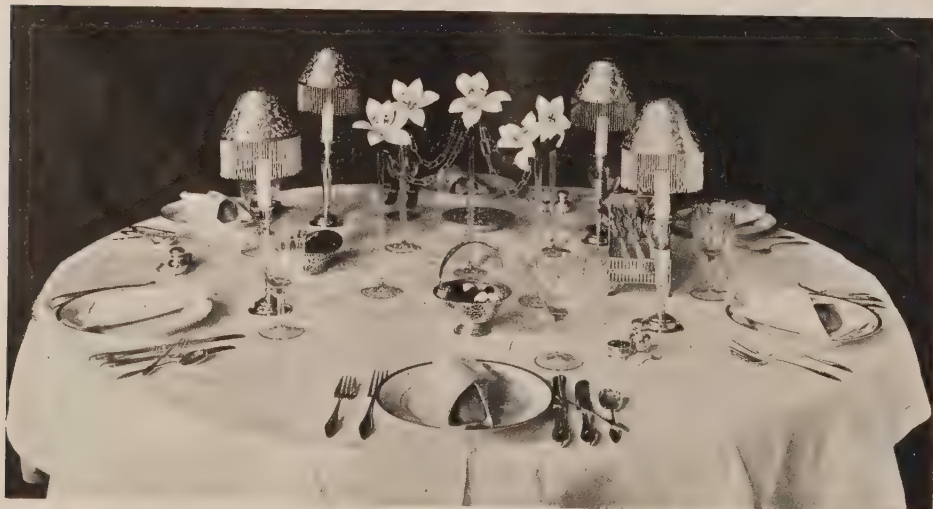


The Late Summer Luncheon



AFTER the extreme heat of mid-summer has passed and nights and mornings are fairly cool, one begins to feel like entertaining, and a luncheon is as easy as anything, especially as it may very well be cold, except for something which can be kept hot in the chafing dish, reducing effort and service. Here is a simple menu:

Melons
Moulded Salmon, Sauce Tartare,
Cucumbers
Creamed Chicken
Bread and Butter Sandwiches
Olives
Salad in Apple Cups
Crackers
Peaches and Cream
Cream Cheese



Tall glasses of lilies for a table decoration.



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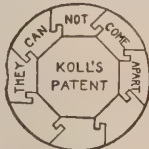
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TABLE CHAT—Continued

For the moulded fish use the canned, red Alaska salmon. Put aside all the skin, bone and soft pieces and cut the hard part into nicely shaped dice. Simmer the rejected pieces of each can in about a pint of water, with salt and a little onion. Strain off the liquid and add a very little mace and enough lemon juice to make it pleasantly acid. Stiffen it with gelatine in the usual way and half fill small moulds with it. When it is nearly set press the pieces of salmon down into it, lay others on top of it and fill up the mould with the

The salad shown in our second illustration is a very pretty one. Medium sized green apples are hollowed out to make cups, lined with heart leaves of lettuce and filled with asparagus tips dressed with a white mayonnaise.

Peaches and cream require no explanation. Have them peeled the last minute and cover them closely that they may not discolor. However else you stint, have the cream rich and abundant. A simple cake, angel, lady, or silver, may be passed with the peaches. Serve the coffee



A refreshing salad for the summer.

remainder of the liquid. Before serving turn each mould out onto a plate, surround it with thinly sliced cucumbers and add a liberal spoonful of tartare sauce, which is merely mayonnaise with an addition of chopped capers and pickles.

In order to manage your meat course economically plan to have a fowl for dinner the day before, two if necessary, and reserve all the white meat. Cut it into dice and heat it in a rich cream sauce. If your fowl has been boiled, make the sauce with half chicken stock and half cream, otherwise use cream only. Or, if all cream is not practicable, use milk and enrich it with unsweetened evaporated milk. You may, if you like, have new potatoes cut into tiny balls, boil them and heat them in the cream with the dice of chicken.

which ends the luncheon in the drawing room or on the piazza.

For the floral decorations you can not do any better than have a tall glass of nasturtiums and leaves in the center of the table, with four smaller ones at the corners. It is a great mistake to arrange nasturtiums without any of their leaves, especially as the leaves are really beautiful in themselves.

A Valuable Asset.

Speaking of table accessories, a set of five slender green glasses for flowers, the central one considerably taller than the others, is a very desirable possession. Such glasses are not specially cheap, but they are always in good taste, and are as useful in the drawing room as in the dining room.



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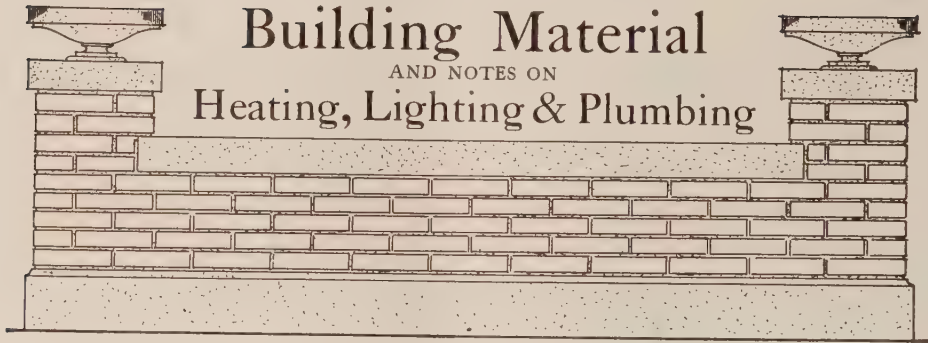


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Building Material

AND NOTES ON

Heating, Lighting & Plumbing



Oil Makes Concrete Waterproof.



WHILE experimenting in an attempt to develop a non-absorbent, resilient and dustless road material, capable of withstanding the severe shearing and raveling action of automobile traffic, Logan Waller Page, director of public roads, discovered the waterproofing qualities of oil mixed concrete, which was announced two years ago. In the meantime extensive laboratory and service tests have definitely established the value of this oil mixed concrete for damp-proof construction, and a new bulletin, No. 230, has been issued by the department of agriculture. This bulletin discusses fully the preparation and use of oil mixed concrete; briefly summarized, the conclusions to be drawn from them are that the admixture of certain mineral oils in small proportions, not to exceed 10 per cent of the cement used, does not lessen the tensile strength of mortar; that the decrease in the compressive strength of mortar and concrete is not serious; that concrete mixed with oil takes much longer to set hard, perhaps twice as long, but that the increase in strength is nearly as rapid in the oil-mixed material as in the plain concrete.

The use of oil does not make the concrete impervious to heavy water pressure, but it does make it practically non-absorbent under low heads.

The value of oil-mixed concrete is said to be particularly great in the construction of basement floors and walls, watering troughs, cisterns, barns, silos and in all parts of concrete structures that are to be made damp-proof.

The oil should in no case exceed 10 per cent of the weight of the cement and for

the most part 5 per cent is all that is necessary. Since a bag of cement weighs 94 pounds, 4.7 pounds of oil, or about 2½ quarts, should be added for each bag of cement used in the mixture.

The sand and cement should be first mixed with the proper amount of water into a stiff mortar, to which is added the correct amount of oil and the whole mass again thoroughly mixed until all traces of oil have disappeared. Particular care should be taken to insure that the oil is thoroughly incorporated in the mixture and the time of mixing should be practically double that when the oil is not used.

The kind of oil is also important and technical specifications are suggested in the bulletin in order to prevent the use of certain oils which might tend to impair the strength of the mortar or the concrete.

For practical use the addition of oil will be found particularly useful in the construction of basement floors and walls. Many of these now in existence are continually damp and such a condition may be remedied by the application of an oil-mixed mortar coat to the old surface. A mortar composed of one part of cement and two parts sand and containing 5 per cent of oil should be sufficiently non-absorbent for this purpose.

Watering troughs and cisterns made of oil-mixed concrete should also prove of considerable practical value in the conservation of water. In the construction of barns, where oil-mixed concrete is used, the interior will be noticeably drier than when ordinary concrete is used.

Owing to their durability, cleanliness and resistance to fire, concrete barns are

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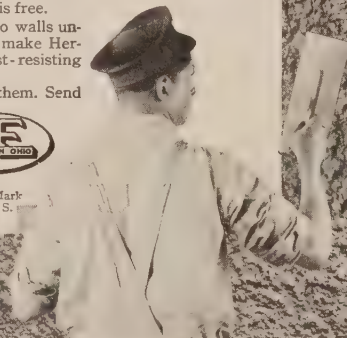
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Makers also of Self-Sentering, the concrete reinforcement that makes forms unnecessary



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becoming more and more popular, but they suffer from the disadvantage that during a long beating rain the side walls are inclined to absorb much moisture, which, ultimately, penetrates into the interior. The addition of oil to the extent of 5 per cent of the weight of cement in the concrete used in the side walls obviates this objection. Barn floors can also be constructed in the same way with advantage. A damp-proof floor is warmer because of the lack of evaporation from its surface and it is also more sanitary than an ordinary concrete floor because of its non-absorbent character.

Attention is called, however, to the fact that extreme care in proportioning, mixing, and placing the concrete is absolutely necessary if the addition of any water-proofing agent is to be of any value. The process of oil with concrete has been covered by a public patent so that anyone is at liberty to use it.

For Cleaning Stonework.

Frequent inquiries are made for methods of cleaning stone. The use of acids is generally to be deprecated, because they tend to injure the texture of the stone. The following suggestions are given by an English paper: "Equal parts of muriatic acid and water will remove spots of mortar on brick or stonework, but it is not the right material for cleaning stone that is begrimed from smoke and dirt. To accomplish this, apply to the surface, with a long-handled fibre brush, a strong solution of caustic solution of pearlsh. Let it remain on for about fifteen minutes, then wash several times with clear water, using a stiff brush or broom for the purpose. If this is not effective enough, scrub the stone with a stiff fibre brush, using soft soap and concentrated lye and sand, allowing this to remain on the stone until nearly dry, then rinse with clear water, using a brush to remove cleaning material. Protect the hands with rubber gloves."—*Stone*.

Experiment Before Staining.

When using stains, a plan which often saves much disappointment is to experiment first on a few pieces of wood similar to that on the job, till the required result is attained before proceeding with the en-

tire job. Allow the samples to dry before judging, as the drying may alter the tone.

An Economy to Repaint.

Every home owner desires an attractive house, one that will appear well, will have a charm at the beginning and will not lose it with years of use; a house that will please his neighbors as well as himself, and that will add to the beauty and attractiveness of the community in which he lives.

It is always an economy to repaint a house when it begins to show signs of paint decay. The failing is due to the effect of the sun and the weather on the oil. It will save injury to the house to repaint, outside and inside, and to use only the best material, for "the best of its kind is the most economical."

When preparing to paint the exterior of the house, very careful attention should be given to the condition of the wood or brick, as well as to the weather. Painting should not be done when the walls are wet. In damp or frosty weather paint should not be put on early in the morning, as the moisture covers the surface and will cause the paint to blister and perhaps to "crawl."

Mile-a-Minute Concrete Work.

A rush job out in Ohio required some novel expedients to secure desired results. At 3 p. m., January 9, a contract was awarded for the erection of a one-story structure 90' x 202' in size, with two monitors, for an acid building for a storage battery company. It was stipulated that the building should be completed by February 1. Considerable concrete was involved and on account of this and to guard against the effects of adverse weather, a circus tent 150' x 350' was put over the site. Construction was begun at 6 a. m., January 10, with a force of 250 men and in 16 days the entire job was completed, thus enabling the lucky contractor to establish a construction record for "dead-of-winter" work. Not only is the ingenuity of using a tent to make speed possible in construction to be highly commended, but so far as the construction itself is concerned, the advantages of uniform temperatures in winter concrete construction cannot be overestimated.—*Concrete-Cement Age*.



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what the cost of first appearance, your satisfaction and your money's worth are *finally* measured by the Quality of the Fixtures that go into your bath room.

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A Full Timber Construction.

J. S.—“I wish to build a house about 16x22 and, being in the country, to build it as cheap and as durable as possible. There is some good timber about but not of sufficient size to make a log house. I was thinking of hewing 2 sides of the log to make it 6 inches through, and making the frame of those logs. The uprights would make a wall 6 inch thick, thereto being nailed a scantling 2x4 inches to receive on the outside metal lath and on the inside wooden lath, leaving the timbers exposed on the outside. Would this not be rigid enough; also warmer than a frame building?”

Ans.—Replying to your inquiry about character of construction for your proposed country home, we would answer “Yes.” With the log construction as you have outlined you should have a perfectly rigid and firm structure, built as you have described and it ought to be easily warmed.

If you build this house as you now describe, we would be very much interested to see a picture of it when completed and hope you may find the opportunity of sending us a photograph of the same accompanied by a little write-up or description of your experience in building it. It is a house that would be somewhat out of the ordinary and I am sure would prove of a good deal of interest to the readers of Keith's Magazine.

Finish for Hardwood Floors.

F. H. M.—We wish to secure for our hardwood floors the most beautiful and durable finish that it is possible to obtain.

Ans.—Hardwood floors may be given a beautiful finish either by waxing or by applying a good floor varnish. If floors are waxed they must be given constant

care, when it is possible to keep them in beautiful condition. A good floor varnish makes an excellent finish and is impervious to dust.

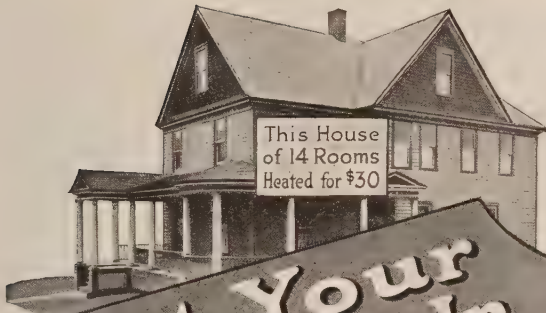
To finish an oak floor in the natural finish, which we presume is what you will want, we recommend a coat of good paste wood filler of the desired shade and three coats of floor varnish of a standard make, while if the wood is not of oak or similar open grain, but is of a close grain such as maple, then the paste wood filler should not be applied, and three coats of floor varnish applied according to instructions given by the manufacturers is the only treatment necessary.

Lot Level.

E. C. R.—I want to ask a question relative to my lot line and the facing of the house for best results. The lot faces east and has an elevation at the front of about 5 feet above the sidewalk level. I do not care for a steep bank, and my neighbor on the north may not care to cut to the grade I may establish for my lawn. What am I to do to get the best results from the situation?

Ans.—In reply to your letter regarding your lot, which lies, as I understand it, 5 feet above sidewalk level and is about the same as the lots north of you, whereas your neighbor on the south is about 2 feet below the natural level of your lot, would say that in my judgment I would never lower my lot if I were you. Five feet above the street is not one bit too much. I would simply terrace down onto the two feet lower level of my neighbor on the south.

As for the approach, if you can build a neat brick wall about three feet high running across the front, with a very gentle terrace sloping down to this wall.



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(Signed) MRS. CARRIE G. YAPLES,
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The Williamson Heater Co.

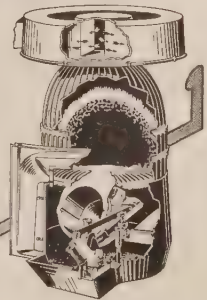
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It will save you many an hour, and many a dollar. From Overfed to Underfeed" tells why we can guarantee a saving of 50% in your coal bills. It also interestingly describes the wonderful principle and construction of the New-Feed UNDERFEED. Send the coupon today—NOW—for real home and pocket comfort next winter.



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WOODS

AND

HOW TO USE THEM



EDITOR'S NOTE.—When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH'S staff of wood experts.

This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

The Passing of the Forest Primeval.

WOOD has been so abundant in the United States, and so cheap, that it has been used for a multitude of temporary purposes, often for purposes for which other products are better suited. Through this and other causes wood has been discredited. The idea of its being used as a temporary expedient, to be replaced later by a more costly material, has been overemphasized. Added to this is the fact that in putting new materials on the market they have been widely advertised, to bring them into especial prominence. The beauty and real desirability of wood has fallen into the background.

Another stage of economic development has now been reached. Wood is taking its place as one of the finer materials, and is being used for purposes for which it is preeminently fitted. So much has been said about the growing scarcity of wood that people are taking the statement as an absolute rather than a relative one. People do not burn great trees now to get them off the ground that they want to turn into grain fields as they did in pioneer days, nor split them into rails for building fences. Information from authentic sources seems to show that for all uses to which wood is especially fitted, the possible supply of wood is quite sufficient.

The time is past when the price was controlled in part by the fact that trees were cumbering good ground, or that

timber land was the gift of the government. It is controlled by the regular economic forces, chiefly the labor in getting it out, and transportation, with a small margin for the land. Practically, a great difficulty seems to lie in bridging the span between the small man who has cut the logs on his place and the big concern which puts lumber on the market. There is small incentive for the owner of the smaller timber plots to get them into such condition that they yield a more or less constant supply.

Peculiar Advantages of Wood

The characteristic qualities of wood are such that we can scarcely conceive of the possibility of banishing wood from our immediate and personal surroundings. There is always a chill in the thought of "marble halls." We have occasionally seen beautiful floors of Gruby tile in a living room, but most of us prefer a hard wood. Furniture made of any other material than wood does not seem good to us. We accept reed and willow, but they, of course, are wood.

The general availability of wood, its strength and lightness, together with the ease with which it is worked, makes it a material unique in itself. In addition to this it is a non-conductor of heat and electricity, as compared with metal; and of moisture as compared with brick and concrete. Nor does it contract and expand constantly with the changes in temperature.

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When people learn to know and love the varieties of wood for their own beauty they will not allow the surface to be disfigured by many of the stains and finishes now used as a matter of course.

Lumber Waste.

It is stated that lumbermen and others have shown recently that only 40 per cent of the trees cut in the forests of this country are used for lumber. In Germany about 95 per cent of every tree grown in the forests is used, thus allowing practically nothing to go to waste.—*Building Age*.

A Wood-Waste Exchange.

The latest business-aid service instituted by the government is a wood-waste exchange. It enables lumbermen and manufacturers to utilize the waste, from the various wood-using industries, to mutual advantage, and must eventually effect a large saving in forest materials as well as in money.

The wood-waste exchange is being conducted by the forest service of the department of agriculture. More than forty manufacturers of wooden articles already have asked to be listed as having certain kinds of waste wood for sale, or as desiring to obtain their raw material in the rough or in semi-finished form from mill or factory waste.

Twice a month the exchange sends out a circular headed, "Opportunities to Buy Waste," containing the names and addresses of factories having waste wood for sale, with exact information as to species, sizes, forms and quantities. Similarly, another circular headed, "Oppor-

tunities to Sell Waste," gives the specific requirements of wood-using plants which desire to buy waste material.

One of the first waste problems solved has been that of a furniture maker in Michigan who wrote to the forest service asking how to dispose of sugar maple blocks and sticks which were cut off in the process of furniture making and which he had been selling merely as fuel. Samples were obtained from him and the forest service then located a scrubbing brush manufacturer who used small maple blocks for brush backs. The result was that the furniture maker was enabled to sell his waste at a much higher price than it had brought as firewood, while the brush maker was enabled to buy brush-back material in suitable sizes at a much lower figure than it had been costing him to buy maple lumber and cut it up.

Firms which have been put in touch with each other through the exchange are expected to notify the forest service when their requirements have been met; then their names are removed from the lists. In this way several concerns which early took advantage of the plan have dropped off the lists. As the manufacturers learn of the wood-waste exchange and the possibilities of its service the lists are steadily growing.

Kind of Logs for Pergola.

H. J. W.—I want some information about pergolas or arbors, the kind of wood to use in such construction.

I also want to get some information about log pergolas. What logs to use and how to treat them. Would appreciate any information.

Ans.—In designing a pergola the architectural location of the house should be taken into account. If the pergola is to be made of millwork it would be well to specify cypress, redwood or white pine. If a semi-rustic effect is wanted use large size cedar posts for the uprights and, also, for the crosspieces. The principal working difficulty is the extra time and care required to join the members of the frame.

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New Booklets and Trade Notes



MAN knows all about how much fuel he puts into his furnace, but as to how much heat he gets out of it and how much he ought to get he knows very little.

"The first step in designing a heating system for a building is to determine the probable heat loss per hour in the coldest weather, after which an equipment should be provided of sufficient heating power to offset this loss when working at its normal capacity," and to consider the quality of the air supplied.

A series of books on Power, Heating and Ventilation, by Charles L. Hubbard, have just been published by McGraw-Hill Book Company. While the work is technical, and the first part treats of steam power plants, the second part covers the subject of heating and ventilation as applied to all classes of buildings, from the small furnace-heated dwelling to structures of large size, and the fundamental elements of the subject are quite fully treated.

It takes up heat losses, ventilation, the various types of furnaces and boilers with the especial reasons and conditions for each, including electric heating; fans; and the devices for controlling the plants. In addition it gives a chapter on the proper care and management of heating and ventilating plants. If the householder knew more of these things he would be more comfortable with reduced coal bills.

* * *

The modern boy on a fifty-foot lot is the subject of "Bill's School and Mine," a book of

interest to other fathers who grew up in the open fields and woods. It is the story of William Suddards Franklin, published by Franklin, Macnutt & Charles.

"And on Saturdays we boys roamed over the prairies picking wild flowers, playing wild plays and dreaming wild dreams—children's dreams. Do you suppose that little Bill dreams such dreams in a fifty-foot lot with only his mother's flowers in the window pots to teach him the great mystery of life?"

"Bill's school seems real enough, but his play and his work seem rather empty. Of course Bill cannot have the fringe of a million square miles of wild buffalo range for his out-of-doors."

"The Land of Out-of-Doors! What irony there is in such glowing phrase to city boys like Bill!"

"Scarcely more than a generation ago every American boy came under the spell of hunting and fishing, the most powerful incitement to laborious days and the most potent of all anodynes for bodily discomfort and hardship; and the problem of educational play is to a great extent the problem of finding a substitute for the lure of the wild for the energizing of play."

* * *

"With the painful recollection of many occasions on which the author has remembered things to be done just too late to do them," The Country Home, Month by Month, a book of 236 pages, has been prepared by Edward Irving Farrington. It is more than a monthly reminder for it gives directions in detail for many important things necessary to be done, when living in the country, with especial reference to the poultry, the garden, and the bees.

The appendix gives a list of the government experiment stations, and suggests taking advantage of their helpfulness. There are planting tables for flowers and vegetables, analyses of fertilizers, spraying calendars, and information regarding poultry. It is published by Laird and Lee, Inc., Chicago.

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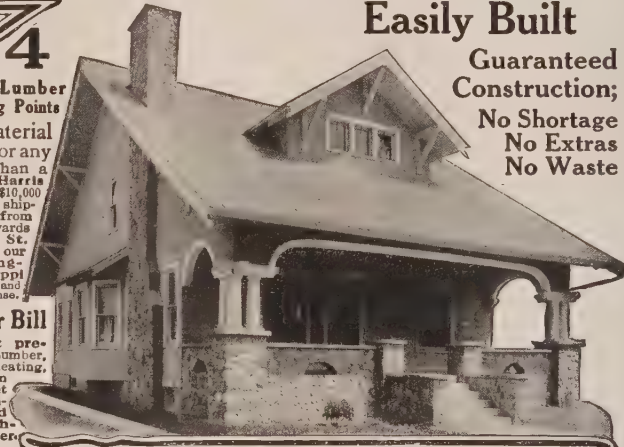
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Sedgwick, Chas. S., 1135K Lumber Exchange, Minneapolis.
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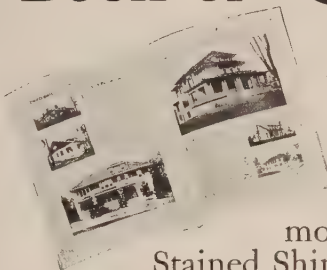
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(Continued on Page 149.)

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(Continued from Page 146)

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Kees, F. D., Mfg. Co., Box 102, Beatrice, Neb.
Phenix Mfg. Co., 048 Center St., Milwaukee, Wis.
Watrouse-Acme Mfg. Co., 520 S. W. 9th St., Des Moines, Iowa.

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Berry Bros., Detroit, Mich.
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Chicago Dryer Co., 628 S. Wabash, Chicago, Ill.

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KEITH'S MAGAZINE

ON HOME-BUILDING

M. L. KEITH, Editor and Prop.

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Just a Word

As a City Grows.



Did you ever talk to the old farmer who had come in a high moving wagon "when the world was young" from some stony mountain farm "back east" to the rich prairies, and have him tell you that he came west to find good farming land, to find a locality where a man could get a return for the work he put on his land? Yes, he came through the flat marshy land around the lower end of Lake Michigan. There was only a little hamlet where Chicago now stands. He had enough money with him to have bought a farm on State Street and Michigan Avenue, and pay for it, too, but with a twinkle in his eye, he came on to find some **good** land and took up a farm among the rolling prairies of Iowa. If he had only known, he might just as well have bought and held a few lots in Chicago, and still have come on to his Iowa farm.

What has given the enormous values to a comparatively small strip of the land over which the early "mover's wagon" traveled? As the old farmer said, "any one with eyes could see that that land never would be any good," but that fact has not interfered with its values. What is the source of this value; has it resulted from the efforts of the individual; and to whom has this great increase in value gone? Partly to the men who had faith in the city and who worked for its growth and greatness; partly to the man who had foresight but did nothing; possibly to the lucky man, if one believes in luck, though we personally believe he belongs in one of the other classifications; and perhaps largely to the speculator, the man who has skillfully turned the advantages to his own interests. To this latter class, really, has the power which controls the growth and development of our cities come to belong. It is he who determines the site of most of the public buildings. He who manipulates the inducements which shall be offered. He who lays out the plats for the new additions, and by his restrictions or lack of restrictions controls their development. He has many ways of securing results.

KEITH'S MAGAZINE

ON HOME BUILDING

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A dream come true.

KEITH'S MAGAZINE


VOL. XXXIV

SEPTEMBER, 1915

No. 3

As They Build in California

E. C. Bartholomew

HOSE who have studied the old California Missions and their predecessors, the mission churches of Mexico, seem to feel that the Californian climate and conditions strongly influenced the mission builders in the variations which they made from the Mexican types of building. It is with a curious sensation that one pauses to remember the old Spanish civilization which centered in Mexico City at the beginning of the nineteenth century, whence came the old mission builders and the early life of California. One of the most

notable features of the Missions of California, especially as distinguished from those of Texas and work further south, is the low wide spreading eaves almost invariably found in these buildings, giving the comforting sense of relief from the heat of the noonday sun as well as the brilliancy of sunshine and strong shadows. This is a feature which the home builders have accepted and made quite their own. Perhaps this is the reason the bungalow is so popular in California. On the other hand, possibly the bungalow as we know it, has been evolved and de-



The wide spreading eaves give a sense of comfort.

veloped in the process of adapting the very wide low eaves to the small dwelling. Nowhere has it been so well done perhaps as in Pasadena.

In a mild climate where it is not necessary to enclose and heat the space under the floors, the processes of building meet very different conditions. Without excavations and deep foundation walls, a building may ramble about at the pleas-

open the whole space, and so are twice as effective as double hung sash which only open the space of one sash. In some localities the casements open out and in other places they all seem to be made to open in. Curtains and shades can be easily arranged for either condition. Casement windows certainly are picturesque, and perhaps especially so in a tropical luxuriant vegetation.



Casements open the whole window space.

ure of the owner, without adding enormously to the expense. Hence we find the houses all on one floor, wide, and low lying, with wide projecting eaves coming down close to the windows.

Where picturesque effects are especially sought, the wide shingles or shakes combine very effectively with other materials, giving a good texture to the surface.

Casement windows are greatly favored in California because, for one reason they

Two views are here given of one of the bungalows on a newly laid out tract in Pasadena. While the buildings of this group are not duplicated, they are designed to be seen as a group. In this bungalow cobble stones are used in an interesting way to buttress the porch piers and chimney. The chimney itself has been studied as one of the features of the house in quite a satisfactory way. Definite facts about a completed building always have a certain interest. Note has



A bungalow in Pasadena.

been given us that this bungalow was built complete including a cement garage and all walks and drive for \$5,200. It is equipped with a gas furnace, hot water heater, lighting fixtures, etc. This house, of course, could not be duplicated in a colder climate at this price.

In climates where the summer heat is intense low roofs are feared on account of the heated ceilings. Even in California a house of this type is generally protected by a complete circulation of the air under the roofs. If you notice carefully you will generally see the the louvres,—a series of overlapping slats, —fitted into the peak of the gables. These overlapping slats are so set as to give a free circulation of the air while protecting from rain and storm. When set very close under wide projecting eaves there is very little danger from rain, but they should be screened to keep out squirrels, birds

or other intruders. In cold climates they are fitted with solid wood doors which may be closed back of the louvres. Registers in the ceilings of the rooms prevents the hot air from gathering and remaining at the ceilings.

Another feature of the California house which either has not been appreciated elsewhere, or is not

suitable to other climate and conditions, is the "cold closet." This term implies a very definite thing to the builder and to the housewife in California. It is built almost like a good sized flue, and somewhat on the same principle. It is the draft which keeps the cupboard cool. It should be built on an inside partition, though a north wall would do. It is about the size of a refrigerator on the inside—as it serves a similar purpose. There must be a free circulation of the air from the ground,—not a cement floor, so they in-



A house all on one floor.



A colonnade of white posts on either side of the patio.

sist, but from the earth,—through the entire height of the house to the roof, with a direct connection to the outside, generally carried between the rafters. Cupboard doors, generally from the kitchen, open this cold closet which is fitted with shelves of a heavy wire grating. It is screened above and below the shelves, all of the shelving and screens being removable. There is a screened opening near the ground for ventilation. The cupboard remains at about the temperature of an ordinary cement cellar. If it gets warm the housewife pours a little cold water onto the earth at the bottom, which seems to be all that is necessary to operate this economical and sanitary refrigerating system.

In California it does not really matter what kind of a house one may have, vines, shrubbery and flowers will make it beautiful. Such slight effort is so well repaid

that even the easy-going dweller in a semi-tropical land is encouraged to his best endeavor. At the same time the setting is worthy of the beautiful picture, and we often see the small, unpretentious house with its tile roofs and carefully worked out details. The patio, or small court which the house partly surrounds, is often flanked by a colonnade, perhaps with white cement posts, which turns the patio into an outdoor living room. It is secluded from the street, shaded and cool; the very heart of the house and its hospitality.

In some ways California has escaped the bondage of the older, more commercial "effete East," and has made beauty an asset of itself. Beauty has a commercial standing, and so has a respect paid to it which is not accorded so readily elsewhere. This fact is reflected even in the smallest of buildings.

Two Women Architects

Virginia Shortridge

Architecture is one of the newer professions to be undertaken by women, and their work has been given very little publicity. The training required is long and arduous, and the return promised is in the pleasure in the work rather than in especial pecuniary profits. Nevertheless there are women architects in all parts of the country; women who have had the best training America affords, and a few who have had the much prized training in the great French school at Paris. They are working in a steady, quiet way and, especially in the beginning of her career, each woman has worked under strong handicaps. The building of homes is so essentially woman's work, and the difficulties which have handicapped these pioneer women are so largely psychological that they must gradually disappear with the progress of the work.

The article which follows is divided somewhat arbitrarily into two parts, the second of which will appear in a following number. Miss Howe received her training as an architect at the Massachusetts Institute of Technology, supplemented by travel and study abroad.—*Editor.*



ANY of the most beautiful buildings in the world were built under the guidance of many architects.

It is a well recognized fact that more minds than one can contribute to the design of a building, to its great and lasting benefit, as may be witnessed by the fine old English houses, and great buildings of all countries.

Perhaps this may account in some measure for the charm of this Cambridge house to those who visit it, and Miss Howe, of Boston, may exemplify the same fact. The house was built about twenty years ago by that famous firm of architects, Messrs.

Cram, Goodhue and Ferguson, who have revived the beautiful English Gothic and given us such poems in stone. Obedient to the courteous unwritten law, Miss Howe has destroyed the exterior line as little as possible in framing her enlargement, and has achieved what is termed a very perfect style of cottage architecture.

If all French architecture from the early times shows the artistic genius of the race, and English architecture shows intelligence and capacity of absorbing and appropriating what has been creditably done by other nations, then our American architects are following their English brothers



A charming house in Cambridge.



There is character in the gables.

and making in various localities very artistic and land-suitable houses—with a new light in housewifely conveniences and a deep appreciation of the value of fresh air.

The original kitchen and butler's pantry in this house have been made into a roomy living room, with large fireplace, and opposite are broad French doors with small

panes of glass, giving out onto a piazza overlooking a pretty garden. The new kitchen was built in a new wing. Between it and the dining room is placed a butler's pantry, with shelves and cupboards, a plate warmer and, concealed by a small door, are racks which hold the dish-towels, out of sight, but where they are dried by the electricity which is turned

on for the plate rack—and above, on both sides, stretching quite three feet either side of the copper lined dish sink, is the dish rest or counter, also copper covered. The bowl is just the right height to avoid the leaning over in washing the dishes. Another of Miss Howe's practical aids for the waitress is a strong board placed un-



The living room invites one to rest and read.



This Cambridge house has a charming group of windows and cupboards.

der the shelves which can be drawn out to stand on when dishes are needed which are too high to reach with ease.

From the pantry one is brought into the very charming dining room where about

four feet of bay makes a suitable place for the sideboard and the little leaded panes add a quaint picturesqueness enhanced by the tendrils of caressing vines.

George William Curtis has said that



The other end of the room.



This pretty play room is for the grown-ups.

every man may be in essence the owner of the land he sees, even though he actually owns not a foot of it—so the charming picture this house presents in its luxuriant setting of trees and bushes gives much to the passerby—as he strolls along.

Strolling, by the way, is done now and again even if this is an age of quick motion, above us, beneath us, and by us—accelerating our every day steps somewhat startlingly at times. It is possible to give a little of the way to Romance, if “tempered with practicality.” One dreams a

dream and it comes true, and the pretty play room for grown-ups may be classed in that variety. For this room on the topmost floor of another Cambridge house is the out-grown child's play-room, descended now to the cosy corner play-room of the elders. Does it not suggest happy, snug hours full of story and good cheer,—and much jollity—with its wood fire, its comfortable corners, and its mysterious manner of

concealing the door knob, so that it can only be opened by a trick-button?

Houses are somewhat like shrubs. It is almost impossible to build them in a style indigenous alone to America. The lilac comes from Persia and the forsythia from China, although named for a Scotch gardener. If the Georgian period is quite as truly colonial, yet they are both after English ways and this wayside cottage certainly suggests the Devonshire lanes more than the practical architecture of a New England farm house.



This cottage at Seal Harbor, Maine, suggests Devonshire lanes.

Miss Howe believes that clients are more willing to give an alteration to a woman to do, in changing a house, because the making the best of not too perfect situations is a well acknowledged feminine quality.

Men, as clients, are less exacting in the matter of their rooms than women, because their demands, besides being simpler, are uncomplicated by the feminine tendency to want things because other people have them, rather than to have things because they



With its wood fire and comfortable corners.

are wanted, and so men are less changeable when once they are prepared to build.

An Attractive Rustic Pergola

THE rustic pergola shown in the picture, has for its support four octagonal cinder-concrete columns surmounted by undressed timber; in fact the picture shows them to be just as they were cut in the woods.

The arbor is 8x12 feet. The columns are 7½ feet high, 2 feet at the base and 18 inches at the top. Each has a foundation of concrete 2 feet 6 inches each way—in other words, a concrete footing of that dimension. A square form of boards was erected and corner pieces inserted to form the octagon. It was intended to give the columns a finishing coat of plaster, but they looked so well in their crude state that it was never applied.

Simple designs of this type compare favorably with the most costly and ornate



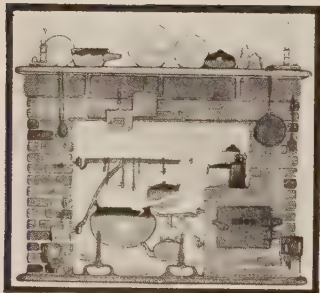
Fine for a country home.

conceptions, and are made at greatly reduced cost. These columns take their place in the landscape with the unobtrusiveness of a tree, while their rough surface is better adapted to the growing of vines than columns possessing a smooth surface. In fact, the columns on the world-famous terrace at Amalfi are even more simple than these octagonal forms.

The concrete could be mixed in the proportion of 1 part Portland cement, 2

parts sand and 4 parts stone or screened gravel, as cinders are not always available. Cinders do not mean ashes, so it would be better to use sand or gravel.

The work here shown was executed in Beverly, N. J., at the suburban home of J. Fletcher Street, a Philadelphia architect. —*Building Age.*



THE KITCHEN



A Woman's Workshop

Edith M. Jones

This magazine is fortunate in securing for a series of articles, one of the few kitchen specialists in the country. Mrs. Jones has the training which fits her for planning a kitchen down to the minutest details so that it fits the conditions of the individual housewife. KEITH'S will publish this series of articles commencing with this current month and any of our readers will be privileged to call on this Department for assistance in the planning and securing of a model kitchen. The photographs accompanying this first number show some of the work which Mrs. Jones has so successfully carried out.—*Editor.*

WHEN we hear our grandmothers tell of the good things that were made in the old New England kitchens it sometimes makes us doubt if modern equipment or change of method is so necessary after all. But we too often forget that conditions and requirements have changed in every way since our grandmother's time. Then each kitchen with its ample fresh air and sunshine was a manufacturing plant or factory caring for the products of the farm and the cool cellars made storage a very simple problem. But we are living now in crowded and congested cities and the problems have changed accordingly. A wonderful revolution in housekeeping has taken place. Many, many of the industries have been transferred to factories, the lives of women have been emancipated from much heavy work and housekeeping today represents greater problems and responsibilities along economic lines. Nowadays buying instead of manufacturing is the important thing for the

housewife to consider. In other words housekeeping has become a business and as the activities have progressed so our workshops and methods must necessarily manifest progress. Every profession or business is tributary to homemaking, hence all exit mainly for the home because homemaking is the supreme profession. It is happiest when understood and no profession offers so wide a range of knowledge, activity or interesting research.

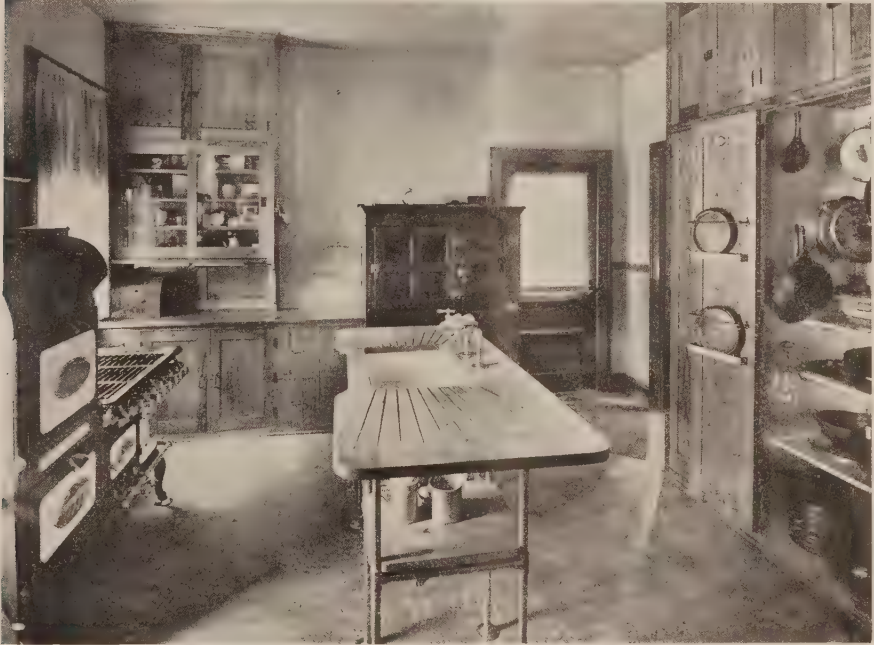
If a man is about to go into business, one of his first questions naturally would be "Where will I locate? What sort of a store or office can I get and how can I fit it up to best meet my business needs?" So when a woman plans her home she must as carefully consider her kitchen, for this important room is to be the workshop and office of the business of her home. Here the housewife or her assistants will spend a large part of their time. And no detail is too small for careful consideration if time and thought can make the

work and workers more comfortable. The equipment must not only be selected carefully but the relationship of the different parts of the equipment must be given much consideration, for in this arrangement lies the secret of the efficient kitchen.

A girl who has been employed in an office before her marriage, who has kept everything in systematic order, and thus

asserted themselves the kitchens express more and more comfort, efficiency and beauty.

The business man for instance would not tolerate the lack of efficiency in his place of business that the housekeeper accepts as a matter of course. Women have accepted inconvenience with characteristic endurance because it has seemed economical and necessary, but the enormous



Conveniences a modern housewife may have.

has been enabled to do more efficient work, seldom thinks it is possible to follow the same ideas in her kitchen after her marriage. But I am constantly reminded that as a man in business is careful to see that his offices are provided with the necessary equipment so the homemaker owes it to herself to look after her workshop with the same idea of efficiency. The kitchen is woman's natural workshop and it is noticeable wherever women's intelligence and enthusiasm have

waste of time and courage is revealed by a glance into the office of the successful business man. This model of compactness bears its lesson and the condensed convenience of the dining car kitchen is a revelation. So as the business man takes advantage of every bit of office equipment to meet the demands of the business world—women in their workshops must take advantage of every time and energy-saving device and study to group these appliances so that the industrial centers

of the home may be judged by the modern watchword of success namely, "conservation and efficiency."

Again let us turn to the business world for a moment and we find every success-

man manages his business through an organization and carefully selected equipment so the successful housewife follows his example in as carefully systematizing and equipping her workshop.

House planning and homemaking are sister terms and cover two of the most absorbingly interesting activities of human life. Throughout all time architecture has been the most universal of all arts in its appeal. Of all building the home claims the most vital personal meaning. Who has not dreamed of such a home as he or she would like to have, and yet how often when these dreams come true we find that we have given the first consideration to the drawing room, while the kitchen, laundry, closets, etc., the most vital rooms of the whole house, have been neglected. This is especially unfortunate because the study of domestic architecture is full of secrets which every woman who is a homemaker knows how best to plan for herself.

Just a word in regard to the work of planning these kitchens. Every architect or every housewife could do it if they gave it their time and earnest consideration, but many are glad to avail themselves of the kitchen specialist whose work it is to share her experience and time in this much needed field of architecture. Realizing the social and economic demands of the day, and with a sincere desire to be of service in the world, the specialists along the line are aiming to place housekeeping on a business basis and to make the workshop of the modern home as efficient as the office of the successful business man.



A pantry with a double sink—one for washing and one for draining dishes.

ful business today is built upon a well thought out organization. Whether the business requires many or few people to carry on the work, the organization is permanent and must be thought out by the one who has the business in charge. The head of the business must understand every point of his business even though he has able assistants who carry on the carefully thought out plans. He also must have all the necessary equipment in his offices to carry on the work in the best possible way. As the business

Typical Colonial Entrances



The Shreve house has a typical Colonial entrance.



HE work of the early colonial builders is one of the powerful influences in a large part of the building that is done today. The modern builder can not do his work satisfactorily without some knowledge of the

colonial types, and the home builder asks "what kind of windows to use with his colonial entrance," and "how to arrange the side lights." A feeling of dignity and of leisure always pervades the best of these types of old colonial work. It is

disclosed in the carefully worked out details, the subtle curves of the mouldings, the variety of the dentile courses and the key mouldings, as well as in the more noticeable features, especially in the slender and delicately detailed "orders" with generally the full classic entablature, but all so daintily designed that it is eminently appropriate for wood. This work could only have been designed and appreciated by leisurely people in easy circumstances.

The woodwork was almost invariably painted white in the colonial work either of the North or of the South, except in the case of the more elaborate houses where mahogany was used for interior work. The reason for this was very evident. The native wood used was a soft pine, and it was painted white, to bring out the delicacy and beauty of the details. Have you ever noticed how clumsy a coarse moulding looks when it is painted white; that a simple board with square edges generally looks better than a moulding that is not well designed? Then notice a moulding with small faces and delicate curves, such as are found in colonial work, when it is painted anything but white and you will see that the fine shadow lines lose their values, and the whole moulding becomes ordinary.

If the colonial householder imported wood, he brought over from the old country the most beautiful wood he could get, so mahogany is used in much of the more elaborate work. The combination of mahogany and white is wonderfully effective, especially as a background for the beautiful old mahogany furniture. The stair rail was very often mahogany even when the other woodwork was white—again for a very good reason. White paint, or paint of any kind would not stand the usage given the hand rail. Our forefathers were very provident people.

A portico very generally protected the

colonial entrance. Sometimes it was semi-circular, but more often it was square. One of the classic "orders" was used for the design of the pillars of the portico and also for the entrance. The door itself was usually wide, sometimes made of three panels, two of which hinged together in opening. Side lights on either side of the door and generally an oval fan light over the whole, made the entrance proper, and this usually opened into a wide hall which extended the whole width of the house, with a glass door at the farther end. The entrance expressed the wide hospitality of the period. The white lines of the muntins showing the divisions of the glass makes a feature of colonial work, and especially of the side and fan lights. The windows themselves were always made up of panes of glass which we call small, in comparison to the great sheets of glass possible to the modern builder. From the outside the small panes are eminently satisfactory, though modern housekeepers complain of the work entailed in the care of the smaller lights of glass, as well as the view cut off. So modern builders have compromised the aesthetic and the utilitarian by cutting the upper sash of the window into smaller lights and leaving the lower sash in a single pane of glass. In many of the old houses the hand blown glass is noticeably different from the glass we get today, and it shows in photographs by the multiplied reflections.

Salem, Massachusetts, was one of the important seaports and the trade between the Indies and the colonies was a chief source of wealth. It was also the home of Samuel McIntire, a famous colonial builder. So it is in Salem that we find some of the finest old houses of this period which were built in the north. The colonial of the South is quite different.

The Shreve houses on Chestnut Street, in Salem, are considered almost typical

of the best colonial work. There are two of these houses, built by brothers, standing side by side, and almost alike. They use the more elaborate Corinthian order for the portico, the same order at two-thirds the scale for the entrance, with the same order in a curious Palladian design in the window over the portico. Elaborate, though delicate carving is a feature of colonial work, for the capitals of the column, for the mouldings, and for much interior work.

A good example of the semicircular portico is also to be found on Chestnut Street, using a form of the Ionic order, which will be recognized by the capitals of the columns. To the casual observer the orders are distinguished by the capitals. The usual form of the Ionic has the face of the capital the same as these, but with the sides different. The Doric is the simplest and often the most satisfying form of the classical orders.

To those who are building homes, and who wish to follow in part at least, a type of colonial building there is this we would say: If you are building of brick, stucco, or wood, and wish beautiful bits of detail in wood, especially for the entrance and for the interior, there is perhaps nothing more satisfying than the colonial. But it



A circular portico with the Ionic order.

should be used in the spirit of its time, and not dispossessed of much of its beauty by crowding it into unwonted positions. It should be used as an heirloom, a jewel, or an "old master," because it is more beautiful than a later time affords. Study the photographs of some of these good old houses. Do not try to copy them. They do not fit your conditions. But build in the same careful, sincere way, studying the actual things you want to accomplish, the essential needs which you must fill. In that spirit, you can use and profit by the skill of the colonial builder.

The Willow Wattle and Birdcages

W. C. Rockwood

THE quaint birdcages of old Ireland are being revived in this country. They are designed and made along the lines suggested by the cages one sees outside the cabin doorways of the Irish peasantry. The birds favored by the peasants are called the linnet, so called because it feeds on the seeds of the flax plant, and more often the native thrush of sweet voiced memory.

As far as American ideas of safe and sanitary surroundings for feathered pets

will permit, the old designs and methods of the peasant willow wattler are being followed in the American manufacture. Those who know well their counties will recognize the cages of Kerry, Waterford, Galway, and Tipperary, and the models are identified by their local name.

In old Ireland the willow stick is known as the willow wattle, the process of its weaving as willow wattling. The bird cages made in New York are of genuine willow wattles, prepared by Irish peasants for the market, under the aus-



Such cages as one sees outside the cabin doorway's in Ireland.

pices of the National Home Industries Association, thus planting a home industry of the old country on a commercial basis here.

This whole process of willow manufacture in this country, especially as carried on by some of the factories employing only hand work is of particular interest with the growing popularity of willow furniture. The matter of greatest importance to the worker is the willow itself. It seems that the desired quality comes largely from France. On account of present war conditions the willow workers are testing the growths of many and various sections of the United States. For several years the government has been distributing this variety of willow to those desiring it, but it does not seem to have been taken very seriously, when not backed by the commercial demand. The report comes from certain counties in Pennsylvania where the willow sticks grown are long and straight.

Before beginning to work with them, these sticks are placed in a tank of water, in order that they may become thoroughly pliable; then, as a sanitary measure, and to render them clean and white, the bundles while still damp are subjected to fumigation by being placed with burning sulphur in an air-tight room. The material is then ready for the workman who has a full sized pattern of the piece he is to make before him. If he is making a chair he commences by braiding together the seat over a frame of heavy wooden dowels. This completed, he puts in the upright dowels which form the legs and

fills in the braided work which shows below the seat, starting by a joint with the seat and working toward the feet. The back and arm sticks are then put in, and, following his drawing, the workman fills in the indicated outlines. In this way, it is hoped to secure more of that subtle



In keeping with the furniture as well.

thing known as originality. How a willow stick can be twisted in almost any form is curious to see. It would appear that the willow itself is "distinctively individual." However, the wooden frames, good, straight away propositions, are handled by machinery and this branch of the service holds forth in a separate building.

Entirely simple and primitive is the method of manufacture. A particular charm about the finished product is that no two pieces are exactly alike, but show



Some of the cages are round like a ball.

by their slight variation the individual character of the material and process.

It is suggested that a woman always looks well in a wicker chair, which may be another reason for their popularity, as a clever hostess does not overlook a fact of this kind.

Wicker furniture may be given any of the soft tones necessary to fit in with a color scheme. It may be made a dull green, brown, blue, ivory or ebony. This is done by hand with a brush, and a coating of transparent shellac is added to fix the color and give smoothness. The col-

oring in sealing-wax red, Spanish yellow, indigo blue and emerald green is done in a bath, where the dye is soaked into the willow.

The development of home grown willows may answer the demand now put forth by the workers. In addition to this a good many of the manufacturers' designs have been distributed among the trade schools and manual training classes of the country and this may help to develop a body of willow craftsmen in this country. Thus willow furniture bids to become an "All American" product, from raw material to finished product.

NOTE.—We are indebted to the courtesy of Messrs. Joseph D. McHugh & Son for the illustrations used in the fore-going article.

Homes Recently Built

As Contributed by Keith's Readers

N. B. We would enjoy hearing from you with a photo of your recently built home

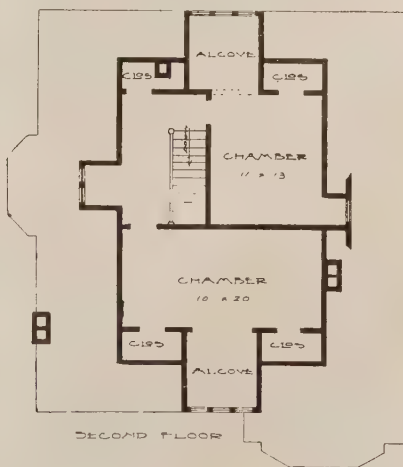
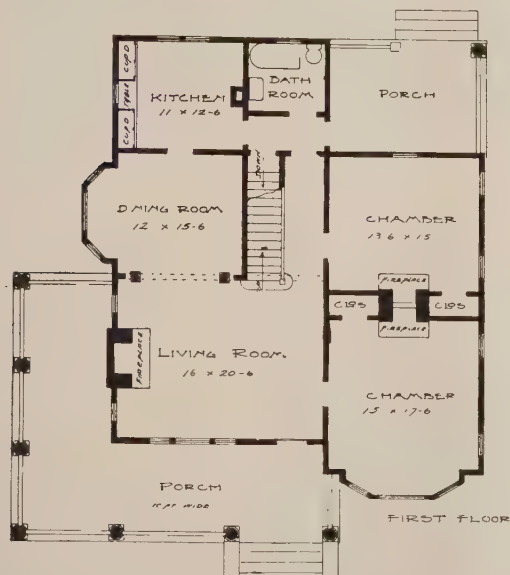


In the old days "A man's house was his castle." Do we realize that now the home of the average American citizen comprises luxuries unheard of even in the great houses of the old countries until quite recently? That he has comforts which even the very wealthy could not compass, only a short time ago? Really the good time to live, as far as material comforts are concerned, is here and now.

The home is the center and heart around which the whole of life circulates. Give a man a little plot of ground and he has achieved independence. This is the heart of American institutions. That which fosters and encourages the individual home helps to build up and strengthen the nation.

The ideal of KEITH'S MAGAZINE is helpful service to the home builder. Most people build but one home. When it is completed and they have lived in it for a few months, they begin to say "If I were building again I would," and they enumerate the things which their building experience has taught them. It is always difficult to get experience at second hand; yet to a certain extent it is possible. This department offers second hand experience in building, and it is very cheap. Just compare a mistake on paper with a mistake in a completed house.

No two people will tell the same story in the same way. Neither do people build a house in the same way. As photos of homes come in to KEITH'S one is impressed with this fact; certain houses



The floor plan has been very popular.

make a wide appeal and similar plans are used in widely separated parts of the country. Keith's readers who have studied plans as they have appeared in this magazine, are probably interested in knowing "How they come out"; what kind of homes all of these people are really getting when they are finished. This month we are showing a group of homes, built from similar plans in a part of the country extending from Virginia to Arkansas, from Wisconsin to South Carolina. You will notice that they all look like *homes*. A sense of comfort per-

"I have completed this bungalow, and find it very satisfactory, having finished the living room and dining room with beam ceiling and plaster panels five feet high. The remainder of the house except bathroom is finished in pine, painted a cream color. The bathroom is tiled, and the walls as well as the woodwork are all white enamel above a wainscoting four and a half feet high which is of velvet tile. All the woodwork in the living room, dining room and hall is solid oak, and gives a very handsome effect, the floors being of polished oak, inlaid on the



As it was built in Virginia and described in the letter.

vades them, and you feel the satisfaction which the owner has taken in the building.

We shall quote some of the experiences which have come to us. What has been done may give helpful suggestions to those who are in the "stress and storm" of building, or who are planning for future work. Here follows the description of a house built in Virginia which has some unusual features, especially in the complete finish of the basement, and the care with which the details have all been carried out. The owner writes:

edge with a mahogany strip. The butler's pantry and kitchen are finished in white enamel. They are each good size, with a storeroom opening on the kitchen porch, which has been found a very convenient arrangement.

"There is a cellar 8 feet pitch under the entire house, including back porches. The walls of the cellar are all finished in white concrete paint, the floors in fawn colored concrete paint. All woodwork is painted white, which gives a very pretty effect, making the cellar almost as attractive as the second floor considering the

location of the two.

"I have hot and cold water in every room, including butler's pantry. The walls of the house are all stippled, carrying a tan color throughout the house, including the closets. The windows and doors are equipped with window strips, making them air-tight, and all of the blinds are equipped with patent fasteners operating on the inside, which

piece. The arrangement is very good.

"The dining room has a semi-indirect lighting system. All of the fixtures were made for the building giving it a strictly bungalow effect; and the furniture, rugs, etc., were made and purchased to give the desired effect."

There is a strong touch of individuality through all of the letters received in this department which makes one re-

does not require opening the windows. All rooms are equipped with electric buttons leading to an enunciator in the kitchen. The house is heated by a hot air plant, and there is also an open fireplace in the living room, faced with a tapestry brick. This building has cost \$10,000 when complete.

"The living room has a center fixture for indirect lighting, and the direct system under the beams and over the mantel-

joice in the achievement and grieve over the difficulties. That other home builders may be spared these troubles and warned of possible pitfalls is the object of this



As it was built in North Carolina.



As it was built in Arkansas.



As it was built in Wisconsin.



As it was built in South Carolina.

home-building series. What pleases one person may not please another, but that which makes trouble for one is very likely to be annoying to another.

In order to learn just what difficulties have been encountered and where the troubles lie, KEITH'S MAGAZINE has sent out a list of suggestions with which many homebuilders have been ready to co-operate.

Here is one "experience" which follows the suggested outline:

If I were building my home again—

I would leave the following features just as they are: The general plans would be the same; location of stairway, size of rooms, height, etc., are very satisfactory.

I would attend to the following things which I neglected to do: I would study wall space more carefully with reference to the furniture; the location of the lights, the doors and the way they swing. I would also plan more carefully for the bathroom to give it a proper level.

I would avoid the following mistakes: I would have the flour bins built in butler's pantry instead of in the kitchen cabinet; would also have space for piano

planned between two side lights against an inside wall.

The feature I like best about my home: We have no pictures of these features, but the built-in kitchen cabinet is splendid, and we find two closets in one bedroom a thing always to be desired. The built-in buffet attracts wide attention for its beauty and capacity.

What I think about the advantage of building from good architectural plans: It cannot be estimated. When contracts are let, the owner has a means of following up the work, seeing that it fulfills specifications, and he knows it has all been figured out in the best possible way.

What I think about building by contract: It is the cheapest, if one obtains bids and then selects the best of them and can take the time to hold the contractor absolutely to the contract.

The fact that gives me the most pleasure about owning my own home: It is a pleasure to work constantly around the place, and every new addition is permanent. Just the ability to point out a well-kept, attractive place and say "my home" is, I guess, the greatest pleasure.

The Inexpensive Bungalow

IT is not uncommon for the prospective home builder to find that his taste for all that is artistic and convenient in a bungalow far exceeds the limitations of his bank account.

Originally the bungalow was a lightly constructed, inexpensive building with but few of its present-day characteristics which now comprise everything modern ingenuity can devise to make a home complete. This metamorphosis has been brought about by the great wave of popularity for the bungalow which has swept over Southern California and other parts of the Pacific Coast and is now spreading over not only all of our own country, but foreign countries as well. As this popularity is no respecter of persons, it has captured the rich man as well as the poor, and the best of architects and designers have turned their attention to bungalows,

and naturally more attention has been given to the expensive than the inexpensive.

So, as the man of moderate means begins to look around for ideas to incorporate in his new home, he is often attracted by that which is too expensive for him. This is not because it is impossible to obtain artistic effects in the inexpensive bungalow, but because it requires as much artistic skill and vastly more labor to adjust all the real requirements to the price of the inexpensive house. This skill is one of the costly elements.

On the floor plans of "Woodland Home" are shown bedrooms with disappearing windows. These windows supply the want of those who desire a great amount of fresh air in their sleeping rooms. They take up practically all of the outside wall space, and as they are



"Woodland Home."

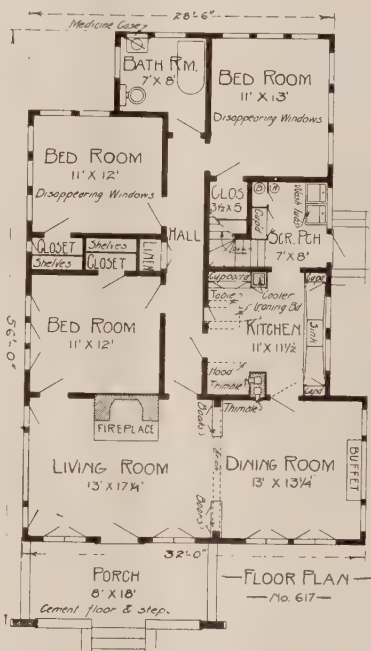
—George Palmer Telling, Architect.

only three feet in length the ordinary bed may be placed under them at any point desired.

These windows open by simply sliding down into the pockets in the wall below. When open they are out-of-sight, as the opening is covered by the stool which is hinged underneath, allowing it to swing up for the passage of the sash. When closed this stool automatically locks the sash in place. As these sash are balanced with window weights, the same as a double-hung window, they are easy to operate.

With these windows in a bedroom it can be almost instantly changed into a sleeping porch. And there are these advantages over a screened sleeping porch that a portion of the windows may be closed, thus regulating the draughts, or all may be closed in cold and stormy weather, or when the house is vacant, keeping out dust and dirt and protecting the interior from the weather.

The "cooler," which will be noticed in the kitchen of this floor plan, is such a common characteristic of the California



bungalow that it is to be found in almost all of them. It is simply a cupboard for food, and having shelves ventilated by screen or made of strips of wood and open at the top and bottom, allowing the passage of a current of air caused by the difference in atmospheric pressure, and by the winds outside of the house. Food placed in the "cooler" is kept cool by this current of air, many times obviating the necessity for ice and refrigerator.

"Woodland Home" is a very attractive bungalow of the "hip-roof" type. While the

setting makes considerable difference to the appearance of a house, this bungalow would make an excellent showing with almost any surroundings. The low pitch and the wide over-hang of the roof goes far to produce its home-like appearance.

The front porch has a cement floor and cement steps. A careful study of the floor plan will disclose its many convenient and attractive features. A cement cellar is reached by stairs from the screen porch and, while no furnace is provided for, there is plenty of room for one.

A Shingle Cottage

THE essential cost in the building of a house is for foundations, walls and roof. If the space that is necessary under the roof can be utilized for the second story and still have good ven-

tilation over, yet without cutting the ceilings of the room, the space enclosed has been used with the greatest economy.

The cottage shown in this illustration is 25 feet in width by 44 feet in depth,

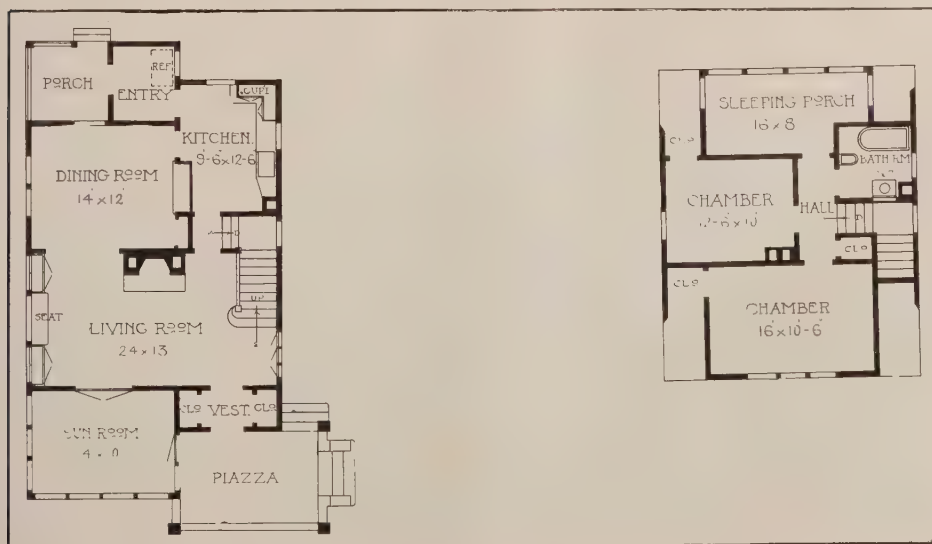


The entrance at the side of the porch leaves an unbroken lawn. —Chas. S. Sedgwick, Architect.

including the sun room in front and the rear porch. It is designed to have a full basement with concrete foundation, and to be built with frame construction, cemented on the outside up to the first story window sills. Above this point the exterior is shingled with alternating wide and narrow courses and the roof is shin-

gled. A suggestion for exterior treatment is to stain all of the shingles green, using a dark shade of green on the wall shingles, and a lighter shade of green on all roof shingles. The outside trimmings, cornices, casings, etc., and also the window sash, may be painted white.

The interior is finished with oak floors



for the first story and birch floors for the second story, natural birch casings, doors, etc., throughout the first story and white enamel finish for the second story. The arrangement of the plan is very convenient and has many pleasing features. It is well suited to the ordinary city lot with either south or east frontage.

The porch entrance is from the side, leaving an unbroken front lawn. The vestibule has a closet on either side of the door, and opens into the main living room, which is 24 feet by 13 feet. The end of the living room is filled by a seat and bookcases with windows over and connects by French glazed doors with the sunroom, which is 14 feet by 10 feet. The sunroom is enclosed with windows and has the same finish as the main living room. There is one central chimney with

a wide fireplace in the living room, which provides a flue for the heating apparatus in the basement. The kitchen has a separate chimney.

The architects' estimate for building this cottage exclusive of heating and plumbing, is from \$3,000 to \$3,400. The dining room has a recessed sideboard and china closet, and connects with the living room by wide cased opening, and connects conveniently with the kitchen in the rear. The kitchen is well provided with wall cupboards, sink, etc., and opens out into a rear entry with space for refrigerator and thence onto the rear porch. The second story has two good chambers with large-sized closets, a good bathroom and a fine sleeping porch in the rear. The shape of the roof admits of these rooms being full height.

Clinker Brick and Cobblestone

HERE is a shingle bungalow in which the use of rough clinker brick and cobblestone adds a pleasing touch to the otherwise plain surface of the exterior. Clinker brick were first produced acci-

dently by the super heating of the inside of the kiln. The brick subjected to the greatest heat tend to liquify and adjacent bricks weld together. In extreme cases they form fantastic shapes. In any case the surface

is vitrified with a rough surface. This brick is used to quite a large extent in the construction of bungalows and very pleasing results have been secured.

The specifications for this attractive bungalow call for rough cedar siding as high as the water table with shingles above for the exterior walls.

The living room and den are at the



An artistic bungalow.

—Jad Yoho, Architect.



front of the house. A closet for a disappearing bed is built into one end of the den, making it possible to convert this room temporarily into a sleeping room if the unexpected guest should make it necessary.

The dining room has a large window seat with a locker underneath and a built-in buffet of extraordinary design. Between the rear porch and kitchen is a vestibule just large enough for a refrigerator.

The cost, says the architect, is \$1,500.00.

A Canadian Bungalow

THIS compact little home was originally designed for a location in Canada which was frequently visited by high winds, snow, rain and extremely cold weather. Every endeavor was bent to

secure the true bungalow effect and yet to make the house in shape and construction "as solid as Gibraltar," and yet it is well adapted to any section of the United States.

The exterior is almost severely plain; its

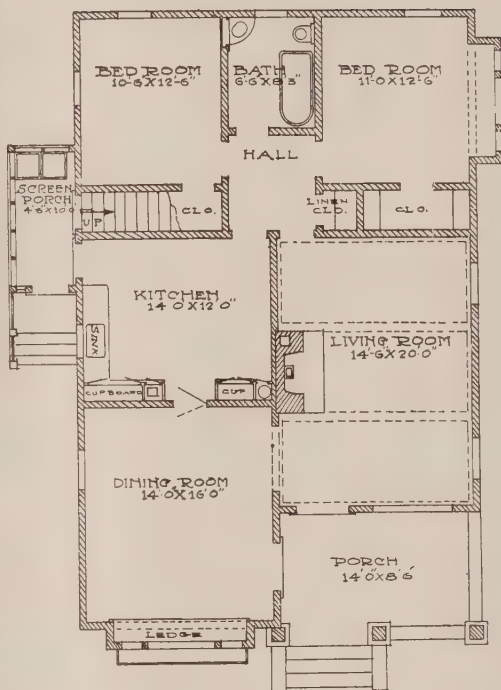


Built to withstand wind, snow and rain.

—Bungalowcraft Co., Architect.

attractiveness, which is always admitted, being due to the fact that every line, angle, and measurement is artistically right. The exterior needs little description: The shingle roof, porch work and exposed faces of chimneys of artificial stone as shown, or of brick if preferred; side walls shingled up to the water-table and then weatherboarded to roof. As here shown the attic is to be used for storage, hence the outside stairway, but two good bedrooms with closets may be built on second floor with a different arrangement providing inside stairs to both cellar and second floor.

The building is about 30 ft. by 46 ft. over all and it has been completed in California with the usual light construction, the architect tells us, for \$1,600.00. In Canada, built to withstand the coldest weather and with full basement and furnace, he estimates it would cost \$2,550.00 ready to move into. The rooms are of good size, with closets and linen closet; the cabinet kitchen has every convenience built-in. There is also a well fitted bathroom. The living room has beamed ceiling, mantel and a broad fireplace, the chimney having three flues, one for furnace, one for kitchen and



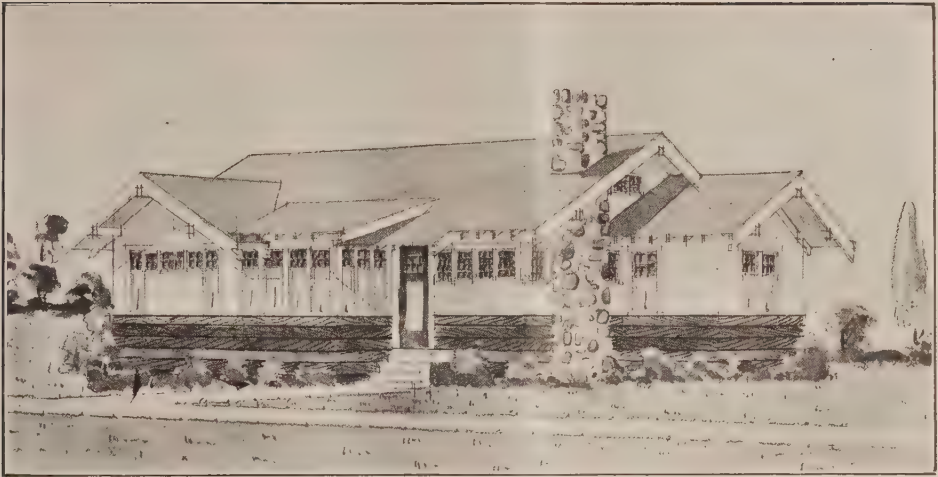
one for fireplace. The dining room is of good size with a wainscoting and plate rail and a pretty window ledge and flower box. The house is light, with a good circulation of air from all directions. Plenty of windows insure this.

Rough Siding and Cobblestones

IN this design considerable study has been put upon the arrangement of the floor plan in order to make it not only practicable and convenient, but to create an attractive exterior as well. In doing this the exterior materials have been given especial consideration. The designer has here used a combination of rough-sawed siding with white cement plaster above, and a shingle roof stained a maroon color. The cobblestone chim-

ney plays an important part in producing the desired results.

The entrance has been placed at the right of the sun porch, sheltered by the wide projection of the main cornice. It opens directly into the large living room. Note the location of the doors and windows in this room. With the fireplace in the end it leaves plenty of wall space for a piano or a large davenport. The hall adjoining gives privacy to the chambers



Light and air is abundant.

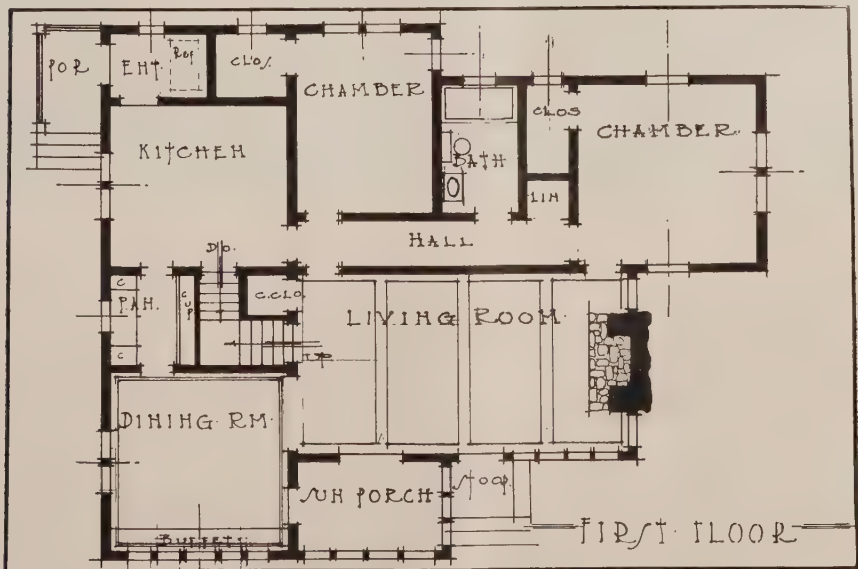
—W. W. Purdy, Architect.

while having access to the living room and kitchen. French doors from the living room open onto the sun porch, while a cased opening separates the living and dining room.

The dining room is large enough to accommodate a family of six. The massive mission buffet extends across the

entire end of the room, and is unusually attractive. A good-sized pantry is provided between the dining room and kitchen. The refrigerator is placed in the rear entry, off which is a small porch.

Two chambers, bath and linen closet, open off the center hall, without an inch of waste room. Large closets open off



the chambers, each having an outside window, affording good light and ventilation.

A stairway leads from the living room to a well ventilated attic, where an additional room could be finished off if desired. Under these are the stairs to the basement, where, in addition to the

furnace room, laundry, fruit and vegetable room, is a drying room. In the basement is also a large amusement room.

The floors and finish of the living, dining room and sun porch are all in oak. The rest of the floors are of maple, with white enameled woodwork. The bathroom has floor and wainscot of tile.

Homes of Individuality

Selected by W. J. Keith, Architect



A charming home.

A Carefully Detailed Bungalow.

TIMBER work, with virge boards and brackets in the gables lends itself particularly well to stucco treatment. An exceedingly fine example of a bungalow is shown in this photograph. The side walls are plastered with cement mortar. The head casings and sills of the windows are continuous around the house and these, with the corner boards, form various sized panels in the stucco. Much

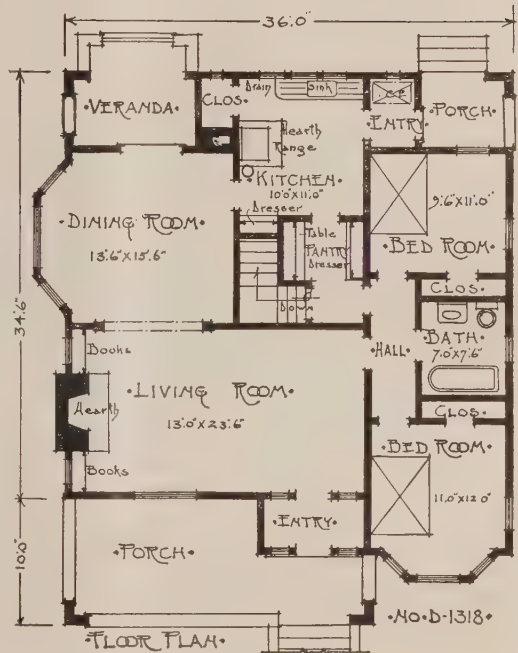
charm is due to the entrance with its substantial columns, and the well detailed gable treatment.

The floor plan is well arranged. The living room is entered through a vestibule from the front porch. An artistic fireplace with bookcases built-in on either side below casement windows completely furnishes one end of the room. A wide window gives a panoramic view of the front garden and approach. Beyond is the dining room with

a wide bay affording views to both front and rear. The center window of the bay is raised to accommodate a china or glass closet below. A veranda with extended balcony overlooks the garden and connects with the dining room through a pair of glass doors. This will make a charming little corner and with an awning shading the balcony form a spot for outdoor dining. Service can be had from the kitchen through the dining room. The kitchen is well arranged with a dresser and good sized pantry. Alongside the range is a large ventilated store closet and opposite an entry, with provision made for a refrigerator, leading to a service porch. The kitchen connects with the bedroom hall and basement through the pantry. Two bedrooms and bath are provided. The front bedroom is unusually desirable, having a bay window exposure to the front. Both bedrooms have windows on two sides and are thus assured an abundance of fresh air and sunlight. The bedroom closets are ventilated to the attic through registers in the ceilings. The attic is provided with ventilating louvres in the front gable. A full basement extends under the kitchen, dining room and pantry. The laundry is located under the kitchen and a cold storage closet under the pantry. The rest of the basement provides ample room for heating apparatus and fuel rooms.

An American Chalet.

The broad sweep of the roof always gives interest to a house. Even though the walls are more or less broken in outline, the house preserves a pleasing simplicity. The lines of the porch are well arranged. The white of the porch posts, cornice and outside finish gives a good accent. Notice that the water table is placed just below the basement window sills, and that the wall is shingled from there to the peak of the



gable, eliminating the line so often seen at the head of the basement windows. This adds to the seeming height of the building and makes a good looking wall surface.

Both porch and living room extends the full width of the house, with a central door. The fireplace is the especial feature of the room, with the bookcases and high windows on either side, filling one end of the room.

A wide opening connects the dining room with the living room, one end of which is filled with windows. The dining room is a good-sized room, 15 feet by 13 feet, though it is dwarfed by the huge living room. A short hall connects the three bedrooms and the bath, while separating them from the rest of the house.

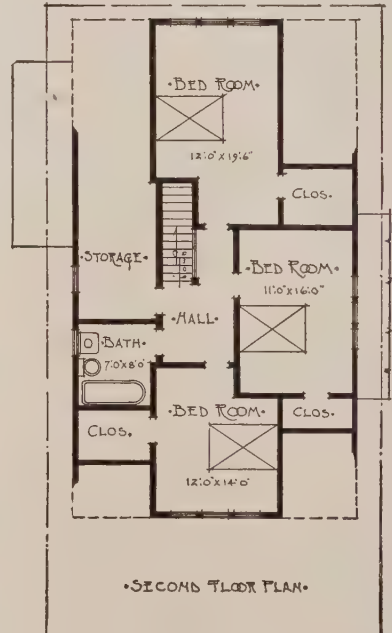
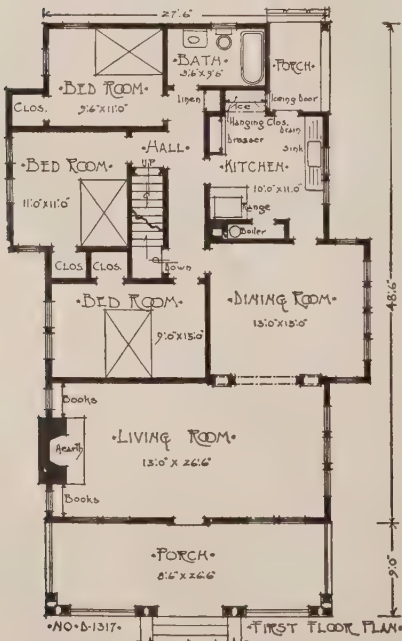
The range boiler is usually one of the unsightly things in a kitchen. You will notice that it is placed in a closet back of the range. Such a shallow closet is ex-



The house has a surprising amount of room.

tremely useful beside the range. The sink has good tables and is not far from the cupboard. The refrigerator may be iced from the rear porch. Over it is a high cupboard. The linen closet is convenient beside the bathroom.

Three additional bedrooms and bath are finished on the second floor, one in each of the dormers, front and rear, and one in the gable. The house does not look large, but it has a surprising amount of room.





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Making the Most of the Bay Window.



BSTRACTLY considered the bay window is a charming feature, but practically it is apt to leave something to be desired. It is often difficult to curtain and it looks rather unfinished without cushioned seats, yet these are not always practical. A very large bay, say eight feet across, gains by being separated from the room behind it by long curtains hanging straight and well pushed back, curtaining the separate windows with the thinnest of net.

In a living room there are two particularly good things to do with the bay window. One is to fill it with a plant table, one of the substantial sort with a sunken top, zinc lined, into which the pots are set, the other to use its central space for a small desk or writing table, with a chair to match it. This latter use is specially good for the bays so common twenty or thirty years ago which had two long windows and a central one high up in the wall and often of stained glass.

In utilizing the bay window in a bedroom, we cannot do better than to set a dressing table in it. This is an English fashion which has much to recommend it, as the light falling from both sides and from above on the sitter before the mirror gives an absolutely truthful impression, even if it is unflattering. Moreover the thin curtains at the windows of the bay are a capital background for a dressing table draped with chintz or cretonne.

Interesting Pieces of Furniture.

New pieces of furniture are constantly being devised, some of them very desirable. One of them, in mahogany, for the dining-room is called the cache silver table. Its top lifts and gives access to two trays, one

above the other, in which can be kept the entire supply of small silver, while nothing in its exterior would indicate that it was anything but an ordinary table.

Another table is among the cretonne covered novelties and this, too, has a lifting top which is hinged and turns back to give access to a tray fitted with all the necessities for sewing and deep enough to hold any quantity of work, which is entirely concealed when the cover is dropped.

The small sized gate-legged tables are not exactly new, in fact are copied from old models, but are as interesting in their way as the large ones and more generally useful. They come in either oak or mahogany and have drop leaves with an extended diameter of about three feet. They cost twelve dollars.

A Novelty in Window Shades.

A recent window treatment is the use of glazed flowered chintz for window shades. They are made exactly like those of Holland or painted muslin and are used in rooms with chintz furnishings to match. A thin net curtain may hang next the pane. These shades exclude less light than ordinary curtains and can be run to the top of the window in gray weather and be quite out of the way. They are extremely pretty for a nursery or for a sun parlor or inclosed porch.

Giving the China a Background.

The china closets you buy are backed either with polished wood or with mirrors, and neither are good backgrounds. The mirrors are worse because they give a confused reflection of little bits of the room which is no background at all, and the result is a jumble. But give your cupboard a backing of definite color and your wares take on new beauty. Either old gold or



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Interiors Beautiful

200 VIEWS



IN PLANNING the new home or in the remodeling or decorating of the old one, the interior treatment, both as to architectural detail and decoration and furnishing, is very important. Correct expression of decorative schemes is a difficult matter for the average person to handle. In view of this, we have published in "INTERIORS BEAUTIFUL" two hundred selected views of the interiors of successfully planned and decorated homes and give, in the captions under the illustrations, the scheme of decoration used.

Fourth revised edition, just off the press, is beautifully printed on enameled paper and has embossed paper cover. 112 pages. Size 7½ x 10.

Contents

Halls and Stairways, Living Rooms, Dining Rooms, Sleeping Rooms, Dens and Fireplaces, Billiard Rooms, Kitchens, Outdoor Living Rooms and Garden Rooms.

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M. L. KEITH

828 McKnight Bldg., Minneapolis, Minn.

silver is a good choice for this purpose. One of the rooms of Oriental porcelain in the Metropolitan Museum is lined with old gold raw silk, but perhaps olive is of more general adaptation, and a good material to use is a light quality of velveteen. The shelves as well as the walls of the closet should be covered and the edges finished with a gimp matching exactly. Old blue is a good background for silver, peuter and crystal, while silver alone looks well against crimson.

This same cheap velveteen is useful for table covers to conceal marble tops. The cover should follow all the outlines of the table top accurately and be edged with a fringed gimp.

Tapestry Papers.

For rooms whose size is large enough to admit of a patterned wall, some of the new designs in tapestry papers are charming. There is one in tones of blue grays and gray blues, with masses of foliage and an occasional suggestion of tree trunks that would be beautiful for a hall or for a large bedroom with mahogany furniture. Pictures are out of the question with such a wall.

Other tapestry papers are in pale shades of green, and are adapted to use with white or light colored bedroom furniture. The gray foliage papers are always pleasing, and some new designs show a graceful arrangement of delicate foliage with a bird here and there, all in gray tones, the background being formed by fine lines. Now and then one sees a foliage paper in brown tones, but that color does not seem to be as successful for this class of paper as the greens or grays.

Scarlet and Orange Glass.

Glass in vivid tones of scarlet and orange was mentioned recently. It can be had in quite a variety of different pieces, boxes and bottles for the dressing table and ornaments of various sorts. It is used effectively to light up a subdued color scheme. The orange is effective with a combination of blue and white and gray walls, the scarlet with blue gray tones. Now is the time with all this fondness for brilliant color to bring out the boxes and trays of scarlet lacquer which some of us must have put away.

The little Japanese cabinets that used to be so popular are very convenient to stand upon a dressing table to hold the odds and ends, which accumulate so rapidly.



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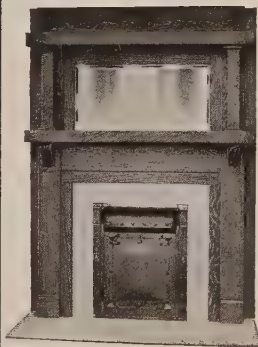
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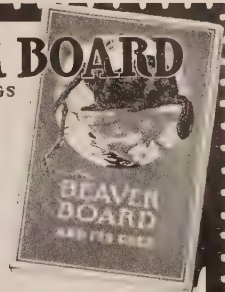
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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

EDITOR'S NOTE.—The courtesies of our Correspondence Department are extended to all readers of KEITH'S MAGAZINE. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

In Mulberry and Gray.

F. H. M.—“Inclosed find plans for Dutch Colonial house we have well under way. May I avail myself of the opportunity of your help in arranging the interior decorations?”

“Kindly suggest color scheme for living room, study and dining room. The stairway has rail and treads stained mahogany, fireplace is tapestry brick of medium dark shade.

“I have three colonial mahogany chairs, old fashioned sofa with a high back, two small chairs that go with sofa. I wish all to be covered with tapestry that shall harmonize with room and furnishings. I have also an old fashioned rocker now covered in velour and large rattan chair. I am partial to old rose and mulberry shades. I am handicapped, for in my town the stores carry but little in materials suitable for interior decoration, so I depend on your magazine and send for samples.”

Ans.—Your sketches show a very pretty home with well arranged floor space. As living room and hall will be practically one room, the wall tint in both should be the same. A soft warm grey, such as a putty grey, will be the best choice, and then use old rose or mulberry tones for rug and furnishings. We would have a plain rug with medium mulberry center and two tones in border, one darker, one lighter than center. Then in hall, use an oriental or an oriental design, in mixed colors, old rose predominating. Personally, we should want a runner on the stair. The old fashioned mahogany should be covered in a small figured colonial tapestry. There are excellent materials of this kind in elephant greys and mulberry coloring.

We should like to see the rocker and the rattan chairs in plain mulberry

velvet. These greys and mulberry tones will be lovely with ivory woodwork. We would use an old gold color scheme in study, with rug in browns and creams, possibly some dull red or rose. Old gold sunfast for curtains.

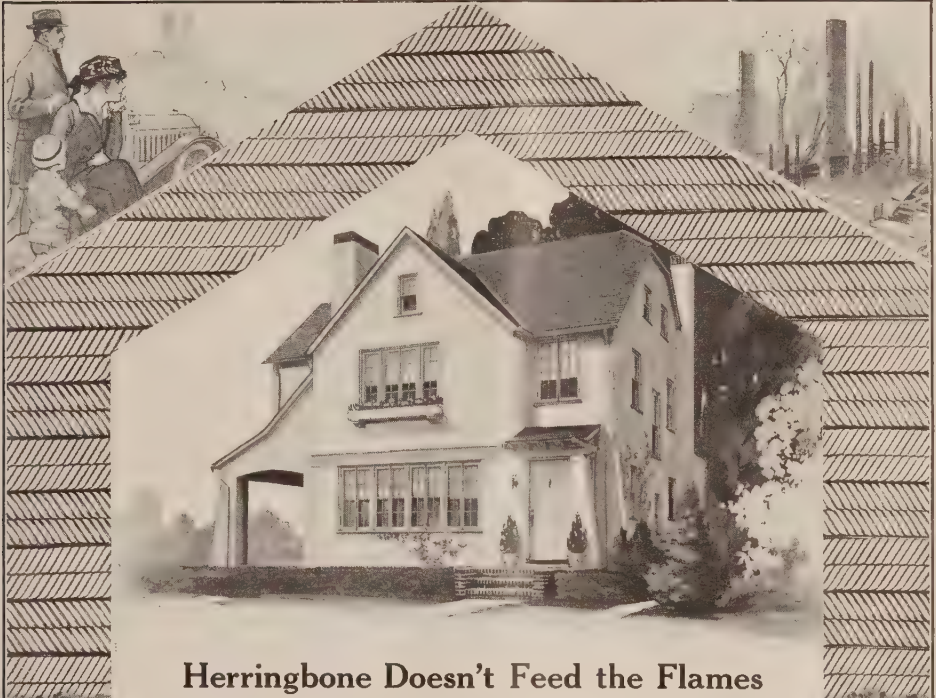
Make the dining room wall a soft ecru, with cream ceiling, rug in old blues, old blue sunfast for valance and side draperies in west bay. We do not like the cupboard projecting into this bay. It should have been placed in the angle on opposite wall.

Colonial Treatment.

F. J.—In building a house southern colonial style would it be good style to use the large fluted columns with small plain ones for side veranda? What style windows with colonial front? What style door, use bell or knocker? We want an attractive fireplace with bookcase built in the wall—what color brick should be used with fumed oak woodwork and furniture?

Ans.—Since you are planning to build a house in the southern colonial style we recommend that you get photographs or cuts of some of the good old colonial houses which you admire and which fit some of your conditions, and adapt them as far as practicable in designing your house. Some good colonial entrances are shown in this number of KEITH'S Magazine.

You must remember that in planning a colonial house, as in following any “style” you are following a mode whose time is long past, and that probably only a few of your conditions can be similar to those of the earlier time. Colonial windows had, of necessity, small panes which are more interesting than our larger sheets of glass. Colonial houses are famous for their beautiful entrances. Most colonial work was designed to be



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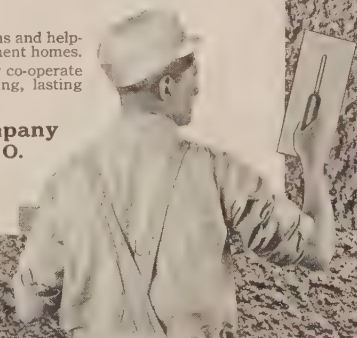
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ANSWERS TO QUESTIONS—Continued

painted white, or for mahogany, and in either case the mouldings were delicate, yet sturdy, not so heavy as would be used for oak. In using fumed oak for your living room woodwork, you are showing your independence of the old colonial period.

To select brick to be used with fumed oak for your living room, see if your dealer can not show you brickwork with fumed oak beside it. Red is always good, or you may like a chocolate color with the oak.

The Finish of Doors.

W. J. F.—I am a subscriber to your magazine and should like very much to have your suggestions concerning our new home.

It is to be of the bungalow type. The woodwork and floors are to be white oak with the exception of the bath and bedrooms which are to be in white pine, enameled white with closet doors to match furniture, early English in one room, polished Circassian walnut in the other bedroom. Should the inside of the doors into the bedrooms be made to match the closet doors? Should mirror be put on inside or outside of closet door?

What about shades for casement windows that swing in?

Ans.—We are pleased to reply to your inquiries. The bedroom doors should all be finished the same on the side facing into the bedroom.

It is a matter of convenience, or preference, whether the mirror shall be on the inside or outside of the closet door—either is proper. It will be quite correct to use a fumed oak stain on the woodwork of the living rooms, in fact much the best thing to do. As to the floors, our personal preference is for a slight stain; but the majority of people leave them natural. They are supposed to show dust less. Your brown fireplace brick are all right, if set in white or cream mortar.

Ordinary shades are used on casement windows, the only difference being in the fixture, which is a bracket projecting out about three inches, with a socket on outer end to receive a second rod for the sash

curtains. Both shade and curtains are set on the sash of the in-swinging casement.

Kitchen Finish.

F. M. P.—Will you help me to plan the kitchen in my new home? The room is fairly large, sunny, and finished in pine, with much cabinet work—cupboards, breakfast nook with settles, etc.

My first thought was blue and white with woodwork all in white and panels lined in black or dark blue. Now I have come to fear all this white will require endless care. Could I use gray instead and still retain a charming equipment in blue and white china, crockery, etc., all purchased with the blue and white in mind? And could I still have an exposed red brick chimney with geraniums in the breakfast nook window? What wall color?

I can imagine a charming kitchen in blue and white, or in gray, red, and black, but I don't seem able to reconcile all the colors. I prefer gray rather than brown stain, since I am using gray throughout the house in combination with white trim and mahogany furniture. Would yellow, gray and blue harmonize in kitchen, which is also a sort of living room? Would you recommend cement or tile brick floor with wool rugs?

Ans.—Nothing will be so good for your kitchen as white woodwork, and if you have a good *varnish* finish, it is just as easy to take care of as the gray. The trouble is that with your built-in cupboards, settle, etc., there is so much of it. Now you can help this out by having white doors to your cupboards, white window sash and casings and white baseboard with cap molding of baseboard stained either green or mahogany, also the body part of cupboards like a frame.

The stained parts must be varnished, so as to wipe off easily. Then paint the wall straw color or light buff. Your blue china will look lovely in this setting and the red brick chimney and red geraniums all right—a pretty touch.

If by cement floor you mean a composition floor—that is all right—make it a dark buff—gray would not be pretty at all. We should omit the lines of black paneling in any case—ceiling should be white.

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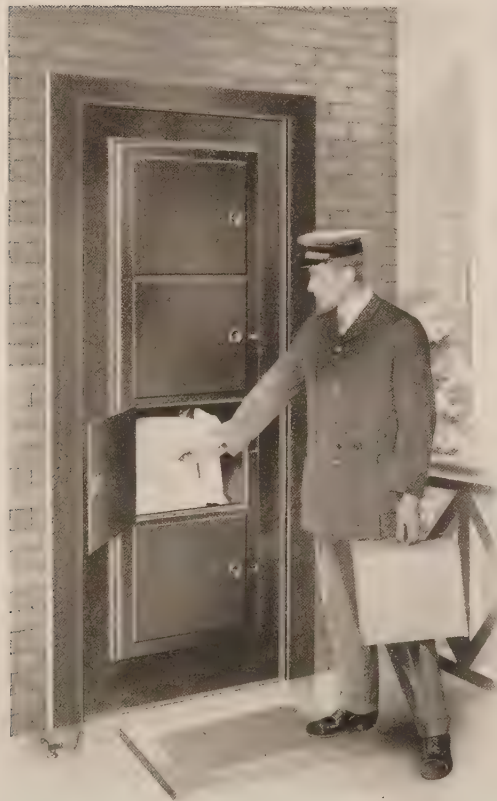
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The Servidor

Warren B. Bullock



The outside of the Servidor.

 KITCHEN door which serves as a mechanical maid, which does away with the intrusion into the home of delivery men and boys, which makes possible the reception of parcels while the housewife is away from home and which locks the goods in after they have been delivered, is a new invention which has originated in Milwaukee and which is being installed in many apartments and private residences that are being erected this year. Architects to whom the new idea has been submitted have hailed it as meeting a long felt want and have welcomed it with enthusiasm, prophesying that within a few years all specifications for apartments, buildings and a large number of private residences will include the Servidor as a matter of course.

The Servidor and its ingenious interlocking device upon which the success of the door depends are the invention of Frank J. Matchette, a wealthy Milwaukeean of an inventive turn of mind, who was the first man to install the stationary vacuum cleaning plant as part of the equipment of public and private buildings. His latest invention is described as a door that is always open and always closed, always locked and always unlocked. The seeming paradox is

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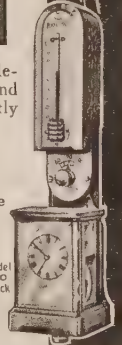
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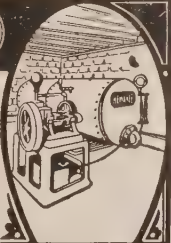
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easily explained.

The Servidor is a new and ingenious keyless four compartment door through which parcels from the tradesman to the home or from the home to the tradesman can be safely and automatically delivered, day or night, without the personal attention of housewife or maid. The tradesman who comes to deliver goods merely opens the outer door of any one of the compartments which is marked "Vacant" puts the goods in, shuts the door and turns the thumb-bolt. When this is done the outer door automatically locks itself against the tradesman as well as against any later comer, changes the small indicator card to "taken," and releases the inner door of the compartment so that the goods can be removed from the compartment by anyone in the kitchen. As soon as the goods have been removed and the inner door to the compartment has been closed and the thumb-bolt turned, the automatic lock again performs its service, the indicator again reads "Vacant," the inner door is locked and the outer door is released. Thus the door is made absolutely burglar proof as only one door to the compartment can be opened at a time. When the compartment is empty it can only be reached from the outer side of the door. When it is occupied, the only access to it is from the kitchen side of the



The inside of the Servidor.

door and neither delivery man nor housewife is ever bothered with a key.

The Servidor is an outside door of regulation size. It is hinged and locked and it opens and shuts like any ordinary door. In addition,

however, it has four compartments which take up the space usually given to panels and glass. These compartments are set in the frame of the door, one above the other, making this part of the door a few inches thicker than the frame of the door. The compartments are 6 in. through.

When the delivery man comes to the outer door, he does not ring nor is he compelled to wait for someone to come to the door. He merely opens a compartment marked "Vacant," puts his goods in and goes away, a great saving in time and efficiency both for the dealer and for the housewife who is not called to the door each time a delivery man appears but who, if she wishes, can wait until all the compartments are filled before she takes care of the goods.

The danger of theft, which is one of the problems of apartment building life, is thus obviated. The only compartment which can be opened from the outside while it is occupied is the upper compartment, reserved for outgoing parcels.

In it the housewife can put her milk bottles or soiled laundry for the tradesmen to gather up but this compartment, like the rest, is so interlocked that the outer and inner doors cannot be opened at the same time.

A little steel rod and a latch with a hole in it solves the problem. As the compartment door shuts and the catch moves into place, it springs a bit of mechanism which throws the rod forward just in time to pass through the hole in the catch, thus effectually locking the door. This rod operates in a metal box which extends the width of the compartment connecting the inner and outer doors. The rod is just long enough so that when one end of it extends through the catch of the inner door it cannot possibly reach the catch on the opposite door. It can only be released by opening the opposite door and shutting it, thus throwing the bolt back and locking the door that has just been operated while the other one is released. At the same time, the mechanism also changes the word on the indicator. A metal plate slides up and down past each indicator glass, these plates being connected by a rod which operates like a seesaw. When the upper part of one face, on which the words "Vacant" and "Taken" are printed; one below the other, shows in the outer indicator, the lower part of the opposite face shows in the inner indicator, the seesaw being operated by the same mechanism which throws the bolt.

Managers of apartment houses are especially enthusiastic over the new invention, declaring that it means the elimination of the parcel room and of many complaints about undelivered and gone-astray packages. Merchants declare that its ever-ready "Give and take" service will greatly simplify the house delivery problem and that the saving of time now consumed by waiting for bells to be answered and by second deliveries will cut down the expense of the delivery service at least one-half, making it possible for one delivery truck to do the work now done by two.

To the housewife who has learned the value and the convenience of the milk box, the extension of a similar service to cover delivery of dry goods, groceries, meat and laundry is expected to make forceful appeal.



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Meals Without Meat

 HERE is almost always a hot wave in the early part of September, more trying than the heat of June or July, when life is a burden and the thought of heavy food nauseates. Then is the time to cut meat out of the daily menu and to find some acceptable substitute for it.

The principal substitutes for meat, containing the same amount of the needed protein, are beans, nuts, cheese, some sorts of fish. Dr. Wiley has recently

stated that what is known as pink Alaska salmon, the cheapest grade of canned salmon, is the most economical form of animal protein. Properly prepared it is very palatable and can be used in a variety of dishes. But we will rule it and other forms of fish out and consider the assembling of the elements of an acceptable vegetarian dinner from soup to dessert.

Menu

Tomato Puree, with Cheese
 Creamed Eggs
 Stuffed Egg Plant
 Cauliflower Salad
 Chestnut Pudding
 Coffee

For the soup use two cans of tomato pulp which are sold for about four cents each. Thin it with rather more than its bulk of hot water, season it with pepper and salt and add a good lump of butter. For many people it will be improved by the addition of a little sugar. Grate a quarter of a pound of sharp American cheese and beat into it two eggs, and very gradually add a cupful of the hot soup. When it is quite smooth pour the mixture into the soup and let it



An egg plant salad.

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It is called "From Overfed to Underfed." Wonderfully interesting. Also shows the scientific construction of the New-Feed UNDERFEED. Contains letters from users who have had their coal bills reduced.

Please remember that a saving of 1-2 to 2-3 is guaranteed the UNDERFEED way. You can't ignore a big "make good" fact such as that. So send for the startling book today. Use the coupon. Do it NOW.

The Williamson Heater Co.
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366 Fifth Ave., Cincinnati, O.

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Protect your family's health and keep your house and grounds clean and sanitary with a **Majestic Garbage Receiver** and a **Majestic Coal Chute**.

Bury the Garbage Receiver in your back yard close to the kitchen. It is handy, but never unsightly. It is sanitary, emits no odors and keeps contents safe from dogs, flies, insects and vermin.

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The only part exposed is the top and door. This opens and shuts with the foot to empty garbage. Empty contents simply take off the iron top and lift out the can.

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Hopper comes out and catches all the coal. None is scattered over the lawn or sill. When closed sets flush with the foundation. Has a glass door giving good light to the basement. It locks from the inside and is absolutely burglar proof.

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The Galt Stove & Furnace Co., Galt, Ontario, Can.
Lansing City, 5212 Saida Ave.



You will find "Keith's" Advertisers perfectly responsible.

TABLE CHAT—Continued

boil up. Serve with croutons. This soup is very substantial and is good for the main dish at luncheon.

For the creamed eggs allow three for two people. Boil them twenty minutes and when they are cold cut them lengthwise and slantingly in rather thick slices. Make half a pint of cream sauce and heat the eggs in it. Have a sufficient number of slices of thick, crustless toast well buttered and lay them in the bottom of a casserole. Pour a very little hot water in

it is tender, but not overdone. When cold arrange the flowerets on a bed of lettuce leaves and cover with a sour cream salad dressing.

The chestnut pudding is made from the large French chestnuts. Boil them for ten minutes, take off the outer shells and pour boiling water over them to remove the inner brown skin, then simmer them slowly in salted water until they are tender enough to mash. To a cup of chestnuts add two eggs, a pint of milk,



Asparagus and eggs.

so that the toast may absorb it and then add the eggs. Brown bread may be used for the toast.

Choose a large egg plant and cut off the top. Scoop out the inside and chop it finely. Add to it a small cupful of bread crumbs moistened with milk, a cupful of nut meats, a small onion minced and browned in butter, salt, pepper and a tablespoonful of butter. Fill the shell with the mixture, set it in a dish with a little hot water and bake about half an hour. Serve on a bed of celery leaves and pass brown bread and butter with it.

For the salad pick a cauliflower into flowerets and cook it in salted water till

sugar to taste and a flavoring of vanilla. Pour the mixture into buttered cups, steam and when cold turn out and surround with whipped cream.

In some parts of the country egg plant is not attainable and a good substitute is made by scrambling eggs, two to each person, and arranging them in a circle around a chop dish, filling in the center with the contents of a can of asparagus tips heated, passing Hollandaise sauce with it. Substitute an onion soup for the tomato puree and use fried tomatoes for the entree instead of the creamed eggs.

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Are an aid to your comfort during the coming cold winter days. The old button method of putting up and taking down storm windows has always been a bugbear. Is unsafe—causes endless trouble and makes it impossible to properly ventilate the home.



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No. 18 solves all of these troubles. Its simplicity of construction makes it easy to hang. Anyone can do it. Only tool necessary is a hammer. Can't be set wrong. Serves a double purpose—can be used to hang screens on in the summer. No. 18 enables you to put up or take down your storm sash or screens from inside the house. No ladder necessary. Storm window or screen cannot be blown off or dropped through careless handling. *Cost Less* than others—*Lasts Longer*—*Gives Better Service*—*Lasts for Years*. If your dealer does not handle them he or his jobber can easily get them from the nearest *Stanley Works Branch*.

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CELEBRATED Old Fashioned fire-
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portioned to **absolutely guarantee** a
maximum heat **without smoking**. The forms
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FIREPLACE EXPERT

You will find "Keith's" Advertisers perfectly responsible.

Building Material

AND NOTES ON

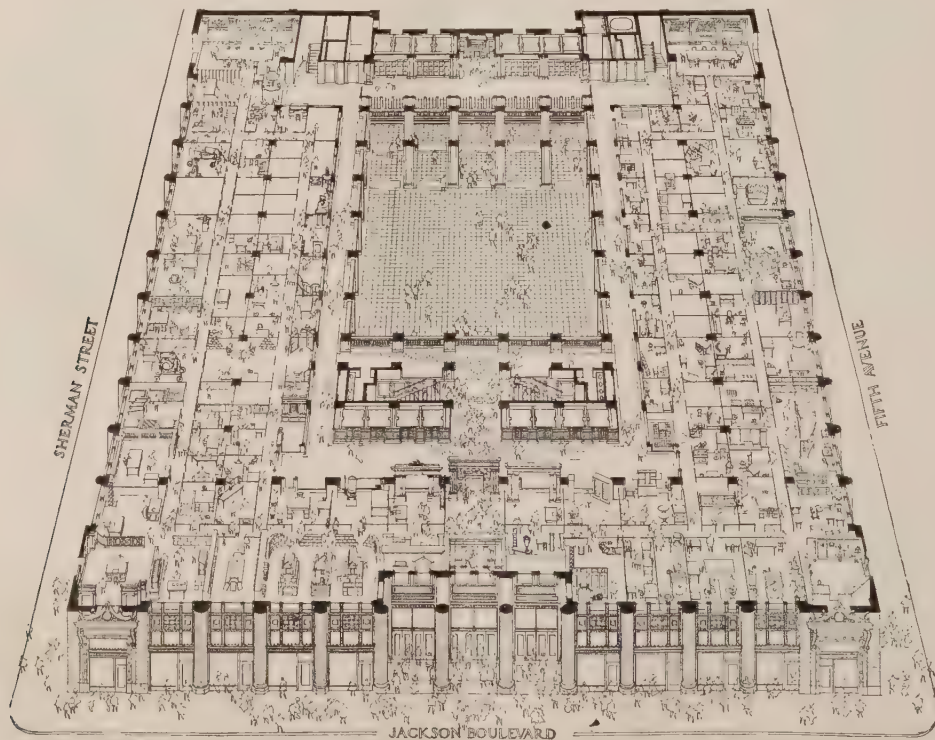
Heating, Lighting & Plumbing

Permanent Building Material Exhibit.

SUPPOSE the prospective home-builder were able to visit the factories where he would find the various materials set up as they would appear when completely in place in his home; that he could examine the details of the installation, and of the material. Suppose also that the factories of

the similar materials, between which he must make a choice, were located next door to each other, with some one ready to show him the advantages of each.

This is the condition which the permanent Building Materials Exhibit has for its aim. Only a good material dares to face its competitors in this way, so the standard for the exhibitors is kept high.



Birdseye view of the exhibit in Chicago.

Such exhibits have as yet been established in only a few cities, the most notable one being in Chicago. In New York there are a number of permanent exhibits of building materials, notably the one in the Woolworth building; architects' samples in the Architect building on Park avenue and the Craftsman Exhibit, but these are not so wide in their scope.

Permanent exhibits including all classes of building materials have been installed in Chicago and Minneapolis and other exhibits will doubtless be arranged as they are demanded.

These exhibits occupy an entire floor of one of the big new buildings; in Chicago the Insurance Exchange, and the Soo building in Minneapolis. The accompanying cut of the Chicago exhibit gives a good idea of the way materials are arranged. The exhibits are installed in booths generally with only a low rail separating them and with attendants and a regular office service in each booth.

When the homebuilder enters the exhibit he sees, in one alcove the brick which he wants for the basement course, also brick for the fireplace all laid up showing the changing effect produced by the color of the mortar and width of joint as well as by the bond in which they are laid. He sees how the brick will look in the wall. Beyond are samples of cement or stucco. He may choose the color and the surface and get minute directions for reproducing them. He may see all kinds of woods with all kinds of finish. He may examine the different furnaces, vacuum cleaners, hot water heaters—everything in fact that he wishes for his new home.

In addition to that he may bring or send his drawings and get estimates on the materials which he expects to use.

Here the owners, architects, contractors and builders will conserve their time and energy,—they will select more advisedly from a greater variety,—make closer, more intelligent comparisons,—effect economies and keep abreast of the latest ideas and developments, but perhaps it is to the homebuilder who is near enough to visit one of these exhibits that the greatest benefit ensues.

Sanitation.

In household affairs Domestic Engineering is the newest science. It com-

Blame the Base



The Lath is Responsible for Most Plaster Failures

It's not so much what goes into the plaster as goes *under* it that makes your walls permanent.

Metal lath is the modern plaster base. Ask any architect.

Kno-Burn *Expanded Metal Lath*

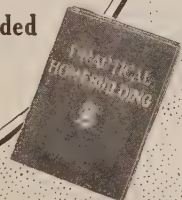
is the ideal metal lath because it is made with a mesh that the plaster grips permanently; because it expands and contracts with the plaster under the stress of sudden temperature changes and because it is equally adaptable for inside plaster and outside stucco.

"*Practical Homebuilding*" tells all about metal lath as compared to other plaster bases. It gives you comparative cost of stucco, brick and frame construction—floor plans—a fund of *real* building information. Send for it today.

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North Western Expanded Metal Company

965 Old Colony Building,
407 So. Dearborn Street,
CHICAGO, ILL.



prises plumbing, heating, lighting, cleaning and ventilation. Of all the sciences this is perhaps the most important for on it hangs the health and happiness of the nation. It means human comfort, and comfort means efficiency and length of days.

The modern plumber has become an expert in applied sanitation. If he takes a broader view of his business than simply making his plumbing lay-out as it is done "in the trade," seeing that the joints are tight and the connections good, if he knows why he does these things and the relations of one requirement to another, we call him a sanitary engineer. But whether we call him a sanitarian or a plumber, to him we must entrust the sanitary conditions of our houses. It is almost impossible for the usual householder to get information on the subject. The fixtures, as he looks at them in the shop, are merely pieces of furniture. Why is one type better than another? What do the differences in the price stand for, and what will they mean after installation. The dealer, when these questions are put to him, gives answers which one often feels ought to be convincing but—they leave only a hazy impression.

On account of this lack of general information, the building ordinance of the community carries additional responsibility. A plumbing job is laid out in conformity with the requirements of the local building code. Building ordinances are generally prepared by the city aldermen—lawyers, bankers, politicians, builders or bakers, as the case may be. They are prepared by an adjustment of the data on the subject, which has been sent in to them.

The idea seems to prevail that the greater the requirements, the better the job of plumbing must be. There is a very strong feeling in the east that our established systems of plumbing should be simplified, that when a new idea and device is added from time to time, some of the older ones may perhaps be dropped. One of the elements of plumbing is the water seal in the curved body of the trap for each fixture. If the water be siphoned off or evaporated, the seal is broken and the air from the pipes has free access to the house. It is claimed that certain applications of back venting tend to evapo-

rate the water from the seal. The ordinances of certain cities require an elaborate system of back venting. Other cities do not require any. A number of cities including Washington and New York require house traps, or as they are often called, main traps in the house sewer. Other cities, including Chicago, prohibit these traps.

Our living conditions have changed vastly in the last thirty years. In New York City, thirty-one years ago, the mortality rate was 27.5, as compared with 14.1 in 1912. In Chicago for the same period it was 21.5, as compared with 14.8 in 1912. In Philadelphia the rate was 22.3 in 1881 and 15.1 in 1912, and in Boston 24.7 in 1881 and 16.2 in 1912.

This decrease in the mortality rate is the effect of many improved conditions. But it seems to be generally accepted that the factor which heads the list of death preventing agencies has been the installation of sanitary plumbing in all its phases, and the enforcement of the laws relating to it.

Sanitary engineers, with a faint echo from the public, are asking for a national or at least a state plumbing code, which should be prepared by those who understand sanitation, and are unbiased by local interest, and which should cover the fundamental principles. No one doubts that there is an accurate science underlying sanitation, and that its principles should be set forth.

Ohio and Wisconsin have plumbing codes which are highly commended, other states have been considering them. There seems no reason why many of the requirements should not be standardized, especially as plumbing manufacturers are often national in the territory their products cover. The sizes of soil, waste, and vent openings suitable for requirements in Chicago would be just as necessary in St. Louis and San Francisco. A standard for depth of seal for traps is also important.

Foreign visitors as well as returned travellers tell of the advance America has made in these matters beyond that of European countries. It is said that Emperor William of Germany recently issued an order forbidding any of his royal household to visit homes or castles where sanitary plumbing had not been installed.

The Builder and The Houseowner



May depend absolutely on the efficiency of the **Hess Welded Steel Furnace**, and on the certainty of full satisfaction with it. A **Hess-Heated** house means a house warmed in coldest and stormiest weather, in every nook and cranny, it means a rapid circulation of heat, together with **unusual humidity**, which imparts a summer-like quality to the atmosphere. The parched, dry atmosphere, with other furnaces, is mostly due to lack of moisture.

It means health and comfort; it means cleanliness, and freedom from dust and gas, common to ordinary hot air furnaces; it means economy of fuel and a minimum of labor in caring for the heater. It means a saving in first cost—for you are dealing with the maker; no middlemen's profit to pay.

You don't have to trust us nor accept our guarantees. Simply hand the purchase price to your own trusted banker, and tell him to hold it till January 1st while you test the heater.

We will send the whole outfit, made to your measure, freight prepaid. Set it up and use it till January 1st; if it doesn't please you in every way, meeting every expectation, send it back at our expense and the banker will then return your money. Isn't that a pretty safe proposition?

Ask us for more information and booklet. Send us a sketch of your house and let us tell you how we would heat it and what it will cost.

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Coming Soon—Our new cottage or pipeless heater. One large register only—right over heater. No horizontal cellar pipes nor air ducts. Inexpensive—economical, ask for description.

Building the House

A Handbook Every Home-Builder Should Have

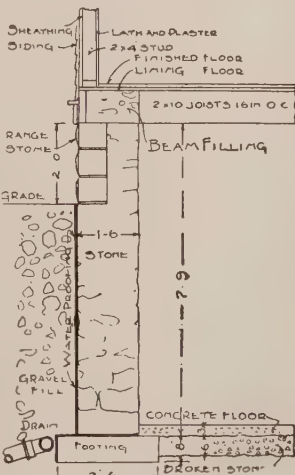
A great many homes are built without an architect's supervision. When this is the case, go out on the job with a copy of this book in your pocket, and you will not only be able to recognize faulty work, but you can give intelligent instructions to the workmen, and show them how to do it right.

See that your home is built right. Look after the construction yourself, and with this book to guide you, faulty work will be detected and you can accomplish more and better results.

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(Fig. 6)
SECTION THROUGH BASEMENT WALL



Many styles of grate and mantels to choose from.

This Grate Does Double Duty

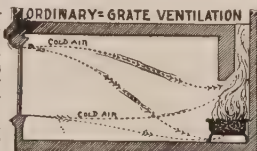
It Combines Perfect Ventilation with Economical Heating

and, with the same amount of fuel, burning any kind, will pay for itself in three years in increased heating efficiency. Heats the house in Fall or Spring better than a furnace and takes about half the fuel.

The Jackson Ventilating Grate

is as beautiful as the most artistic ordinary grate and affords the same sense of coziness and cheer; but it ventilates, not dangerously, with air drawn across the room from door and window cracks, *cold*, but healthfully with air drawn in from outside thru a fresh air duct, circulated around the fire and sent into the room thru the register over the arch, *fresh but warmed*. Gain comfort and save money by investigating. Any mason can set it up from our **Complete Plans Furnished Free**.

Send for Free Catalog of our wood mantels, andirons, and all kinds of fire-place fixtures, as well as ventilating grates, with explanations, illustrations, full information and prices; also reference to users in your region.



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THE ARCHITECT'S CORNER

What Is YOUR Building Problem?

Put Your Home-Building Problems Up to Us, and We Will Give Them
Careful Study and Reply Either Through These Columns

Or by Mail When Stamp Is Enclosed.

Hidden Stairway.

C. E. S.—I wish to ask your advice on my plan for a house, especially the "hidden stairway" for a house of this class. I want a central hall and also want to keep my house compact, yet roomy and comfortable. I thought of having my stairway in the rear of the hall, so that a back stairway would not be needed.

Ans.—In answer to your inquiry regarding "hidden stairway," I wish to say that in my judgment this scheme makes an exceedingly practical stair and under proper architectural detail could be very attractive, even though it is hidden as you say.

The start of the stair would show and the rear portion of the hall containing it really becomes a "stairs hall," which would be more pronounced by throwing a beam across the ceiling between den and stairway.

Sheathing and Metal Lath.

J. S.—I intend building a small house in the country, the exterior to be stucco on wire lath with timbers showing. Is it practical to put the cement mixture for the wire lath with nothing on the back?

Ans.—You have written us concerning the subject of proper method of using metal lath and stucco finish on a residence.

This subject has been very fully covered from time to time in KEITH'S MAGAZINE and I presume you have overlooked these articles. As I understand your question, it is whether a frame house will be sufficiently strong and durable if the wire lath is put over the studding without enclosing the house in sheathing boards. It would not.

A very small summer camp could be constructed this way providing that the studding was put a little closer together than it usually is placed, but as a general rule the building requires the sheathing to give it the necessary rigidity. The metal lath

can be nailed directly onto the sheathing boards, but it is much better to use an inch or inch and a quarter furring strip set about 16 inches on center and stretching the metal lath over same. This gives you the inch air space between the outside plaster and the sheathing boards.

Treatment for a Brick Mantel.

A. D. F. Archt.—Woodwork in this living room, including beams, are light tobacco brown. The fireplace is all in birch and is massive. It is cream pressed brick with black iron spots. The mortar has been darkened with lampblack until it is a slate color; hearth about color of woodwork. The walls above panelwork are apple green; ceiling cream. This room is to be redecorated, leaving woodwork as it is. The lady wants to paint this mantel red and make walls cream. I built this house and think that to paint such a mantel is wrong. It is modern and well done. They are tired of the green wall and want cream and are afraid the mantel will not stand out in contrast.

Please suggest a proper treatment for this room. There is no change in dining room, which is apple green.

Ans.—We agree with you that it would be a grave mistake to paint the brick mantel, and a terrible one to paint it red. The iron spots in the cream brick together with the dark mortar will sufficiently differentiate it from the wall. We think that this mantel taken in connection with the brown woodwork, beaming and paneling, will make a distinguished and effective room, if the plaster between panel strips be covered with dull old gold burlap or grasscloth and the wall above painted deep ivory. The cream ceiling can remain. Keep the room in these tones of brown, dull gold and ivory—and it will be refined and unusual. The rug should be in brown and cream with some rose—the draperies old gold.



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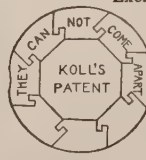
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WOODS

AND

HOW TO USE THEM



EDITOR'S NOTE.—When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH'S staff of wood experts.

This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

A New University Extension Course on Lumber and Its Uses.



LARGE proportion of the labor in this country concerns itself in one way or another with the working of wood, in some of its forms, with the handling of lumber, of wood, or of some of their products. Many of these industries require a most discriminating use of the material. Yet the amount of information available on the subject is absurdly small. To the student or young craftsman there is no way to obtain any systematic information on the subject in general. The more or less experienced man, who may wish to know more about the individual qualities of the woods he is called upon to work, must acquire his information by the slow and perhaps bitter experience.

The University of Wisconsin is the first great institution outside of the federal government to recognize the true state of affairs and to put forth an effort for its correction. The Extension division of the University has announced a correspondence study course in "Lumber and Its Uses," which is the first of a series of courses which are being planned for those engaged in the wood working industries. This is the first course dealing with lumber ever offered to the general public in the United States. The course has been prepared for this work by one of the best authorities in this country and is planned to be of especial value to lumber dealers, contractors, carpenters, and all others whose work relates to the use of this important material.

The assignments for the course, based upon a text book and other printed material, are as follows:

1. The Structure of Wood. Porus and Non-Porous Woods, Springwood and Summerwood, Sapwood and Heartwood, The Figure of Wood.

2. Physical Properties of Wood. Softwoods, Hardwoods; Useful Properties, Weight of Different Woods, Bending Strength, Crushing Strength, Tensile Strength.

3. Physical Properties of Wood. Stiffness, Toughness, Hardness, Effect of Moisture, Shrinkage.

4. Standard Grades and Sizes. Purposes, How Established, How Maintained, Principal Systems, Nominal and Actual Dimensions, Shipping Weights.

5. Structural Timbers. Specifications of Manufacturers, American Society for Testing Materials, U. S. Forest Service, Definitions of Defects.

6. Seasoning and Preservation of Timber. Air Drying, Kiln Drying, Wood Preservation.

7. Paints and Stains. Purposes, Composition, Methods of Application, Adaptations to Specific Woods.

8. Lumber Prices and Cost of Wood Construction. Comparison of Lumber Prices with Prices of Other Commodities, Comparative Costs of Building with Lumber, Brick, Stone, Stucco; Standard Mill Construction.

9. Specific Uses of Woods. Lumber Production, Woods used for Paving Blocks,



The Cost Is Small, Mr. Builder

For the many valuable suggestions you can receive from the plans, editorial matter and advertising in every issue of the National Builder.

It is to your interest to know about the quality and prices of the many different materials—both old and new—that you will buy when building or doing repair work.

The special feature of this magazine is a complete plan 24x36 inches, drawn to scale. This may be a house, bungalow, barn, two-flat building or double house. They are the same as an architect's blueprint and show front, side, rear elevations, floor plans and details with complete bill of materials.

You Will Also Be Especially Interested

in the practical, easily understood articles on building construction and *the many pages of reliable advertising*. This advertising will introduce you to the best of the old standard materials and tell you all about the newer ones, which in many buildings replace the others, at greatly reduced costs.

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to everyone interested in building, as it is published distinctly for the contractor and builder doing the average run of construction work.

Just send the coupon below and get the best possible value for your money. If you mail \$2.00 with the coupon, you will receive two years or twenty-four issues. \$1.50 one year or twelve issues; \$1.00 eight months. 15c per copy.

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Works Wonders in Beautifying Home!



For Simplest and Grandest Homes

CHARMING Moorish beauty and dignity of appearance of Metal Spanish Tile gives an air of distinction to the home graced by this wonderful new and practically indestructible roofing.

It has taken home-builders of America by storm, for it is the modernization of the wonderfully beautiful roofs of historic Spanish edifices.

The art of making this roofing, left behind by fleeing Moors driven out of Spain centuries ago, until 1910 could not be made practical for the modern home, despite its alluring beauties.

After years of experiment, we have hit the solution. That is why today we are able to offer American homes the amazing attractiveness of

Metal Spanish Tile Roofing

Its scores of vital, practical advantages cost no more than common roofing, yet mean tremendous economy—it needs no repairs and outlasts several ordinary roofs because of its practically indestructible metal construction.

It is absolutely wind, weather, storm, fire and lightning proof.

Easy to apply. No soldering, no special tools—any ordinary mechanic can apply it. Interlocking system by which tiles dovetail into each other makes the roof absolutely water tight and provides for expansion and contraction perfectly—summer and winter. It is guaranteed non-breakable.

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10. Selection of Material to Build a House. Kind, Quality and Cost of Framing, Sheathing, Siding, Shingles, Flooring, Interior Finish, Doors.

The Discovery of Mahogany.

Like the use of a great many of the factors connected with the arts and the sciences, the discovery of the beauty of the grain of mahogany for furniture was accidental, says a London contemporary. The story goes that a certain West Indian captain who had brought back to England some planks of mahogany as ballast, decided to give the wood to his brother, a Dr. Gibbons, then building a house in King Street, Covent Garden. But the planks were so hard that the carpenters objected, and the plan for using them fell through.

Some time later, Mrs. Gibbons wanted a small box made, and the doctor sent the mahogany to a cabinetmaker. In his turn the cabinetmaker objected to the hardness of the wood, but the doctor persisted so much in his request that the order was finally executed.

The finished box polished so nicely that the doctor ordered a bureau made of the same wood. The cabinetmaker displayed that in his shop window before delivering it. The Duchess of Buckingham saw it and begged enough wood from the doctor to have it duplicated, and mahogany furniture soon after came into favor.—*Building Age*.

Question Answered.

W. G. W.—I am promptly accepting your invitation in July number for information from your wood experts.

I would like to know what is best to use for piazza floors? Most people here use hard pine; we expect to, but our contractor says cypress painted will outwear any kind of wood. We considered cypress too soft for flooring. Please tell me if it would get splintery? It would cost \$20.00 more than hard pine, which is only a trifle if it is really the best to use. If there is a still better wood for outside flooring, please tell us. We have our choice of red birch, maple or hard pine (best quality) for living room, hall and dining room floors.

Please advise us the relative differences of these woods. All the interior woodwork is cypress. Is Washington fir good for porch pillars and doors?

Ans.—You are to be congratulated on the care you are exercising in selecting the material for your home and on the fact that you realize the very slight difference in the cost of the raw material is not a matter of very great importance compared with the value of what you secure.

Wood makes the best floor for the piazza and this problem is merely to select the best wood for this purpose.

If you can secure 2¼-inch face quarter-sawn heart Cypress it will make you a very good floor and will last fairly well. It is, of course, much softer than either Long Leaf Pine or Arkansas Soft Pine and will not resist so much wear. You should not use flat sawed flooring under any circumstances.

Probably you will secure more service by using all heart edge grain 2¼-inch face B. & Better Arkansas Soft Pine, Long Leaf Pine or Douglas Fir. Have the contractor insist on being supplied with the exact length of flooring that will be used; that is, do not permit him to splice two pieces to make a length.

The life of the floor will be increased if, before it is laid, you will have the grooves filled with thick white lead and laid while the paint is wet. That will give you a floor that is practically waterproof, provided the surface is primed as soon as finished.

The Arkansas Soft Pine and the Fir will hold paint better than the average run of Long Leaf Pine; they contain less pitch. Long Leaf Pine, however, is harder and will stand more wear.

Hard pines are what may be termed laminated woods. That is, they are built up of alternate layers of hard and soft wood. Birch and Maple are solid formation and ordinarily will show less wear than the pine. Birch flooring will take any stain treatment you care to give it and can be finished to harmonize with the woodwork.

Washington Fir, or Douglas Fir as it is also called, is good for almost any purpose you elect to use it. It is being used extensively in the manufacture of porch pillars or columns and doors.



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Influence of Indoor Living.



MAN, like a horse, is naturally an outdoor creature. As the race has been crowded north toward the frigid zone, houses that will protect from the cold and the storm have become a necessity. The tendency of the age toward concentration of the people in cities tends to make man an indoor creature," says Dr. W. A. Evans in the Chicago Tribune.

The primitive man of the far north is small in stature which must naturally be credited to the bad living conditions under which they spend so much of their time. Progressing toward the south the aboriginals are generally larger with better physique. The American Indian is well built. The negro from Africa is larger.

English and American Housing.

Some rather interesting points were developed in the course of the discussion on housing at a meeting following the visit to England, which the National Housing Association organized last summer, to study the work there. In the discussion of the human side of the problem comment was made upon the very small number of aliens in the English slums and the homogeneous character of the population in the garden suburbs and municipal dwellings. This is in wide contrast to the diversity of nationality in the crowded sections of American cities.

The effect of the management on these communities, whether municipal, co-partnership, real estate interests, or a garden community was considered, and followed by a discussion on house plans from the tenant's point of view, and recreation in the garden communities. The single family house, rather than the multiple dwelling, met with unanimous commendation, but when it came to interior arrangements the conference felt that America had more to teach than to learn. The success of the English in providing for wholesome recreation in their garden suburbs and villages,

however, was held up as something for us to emulate.

In a survey of housing conditions in Philadelphia with relation to causes, a study of the effect of improvement upon rents proved the fallacy of the statement that sanitary betterments have their reflex in additional cost to tenants. An investigation into the effect of home ownership upon citizenship revealed that where the percentage of privately owned homes is high the congestion is least, the death rate usually lower and incidentally the greatest independence in politics manifest.

To Arbitrate Labor Questions.

The Builders' Exchange of Philadelphia recently organized an advisory board, composed of representative men from the different building trades men who are familiar with the trades organization and their workings. The duty of the board will be to hear and settle, if possible, all misunderstandings in the building trade and to avoid loss of time for the employed and loss of money for the employer as the result of strikes. The board is composed of men from the Builders' Exchange, master plasterers, roofing and sheet metal contractors, Bricklayers' Co., Master House Painters' Association, Master Tin and Sheet Metal Workers, Mason Builders' Association, Master Carpenters, Master Stone Cutters, Lumbermen's Exchange and the Granite and Blue Stone Cutters' Association.

What Paint Will Do.

Ask any real estate man what percentage of value is added to a house by a fresh coat of paint and you will be surprised at the size of the figure he will give you. Many householders have the habit of putting off painting until a house fairly screams for it—and they perhaps figure that they are economizing. Not so. Good paint, applied at regular intervals not too far apart, is the true economy in that it not only actually raises the value of a house by improved appearance, but through preservative in-

redients, prevents and arrests decay. The man who lets his house become an eyesore in an otherwise well-kept locality should be taxed for the heavy damage he is doing to that community.—*National Real Estate Journal.*

To Make a Kitchenette.

When living in very small quarters and desiring kitchen conveniences in order to entertain occasional guests, or to get one's own breakfast, a closet that is not needed for anything else can very readily be converted into a kitchenette. Have a deep shelf put in at a convenient height on which to place a gas plate or tiny gas stove, which may be connected with the gas fixture in the room. Cover the walls with white table oilcloth. The shelf may be covered with oilcloth or with zinc. Around three sides of the closet have shelves placed at about the height of the head, yet easily reached, to hold necessary supplies, with additional shelves at one and for dishes. Hooks should be placed under the shelves for cooking utensils preferably. A small piece of linoleum will be sufficient to cover the floor.

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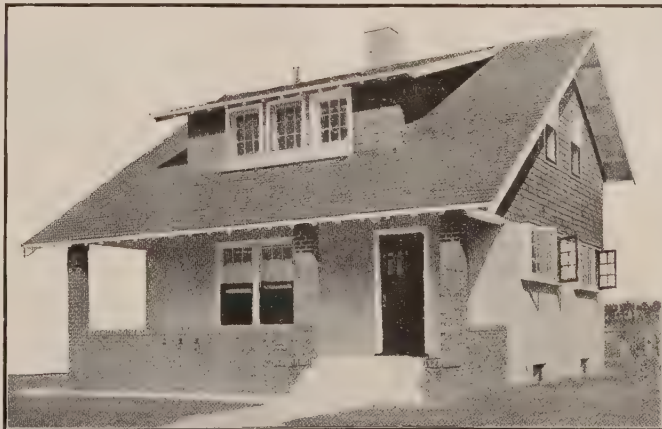
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The Vacuum Heating Company, of Philadelphia, have issued a pamphlet descriptive of the Mercury Seal Apparatus, for use with any system of heating which requires a regulating device for controlling the supply of vapor or steam to radiators.

The air is ejected from the system through a seal of mercury, but it can not return because its passage is trapped by the mercury reservoir in the bottom of the seal. They claim that by checking the fire the apparatus can be run into a vacuum so that the steam expands and heats a much larger radiator than would be possible otherwise. They invite correspondence regarding either the apparatus or the engineer data necessary to its use.

The days of the good genii and fairies are supposed to be past, but their gifts are still with us. We set a little pointer on the wall and our rooms are kept at an even temperature all winter, only that the genii refuses to shovel coal. This is what the Minneapolis Heat Regulator Company has put at our disposal. It is only necessary to keep fuel on the fire, and to wind the clock. This is not a new thing, having been in service throughout the country for twenty-seven years. Now an eight-day clock attachment has been added to their thermostat. They also announce a new model, No. 35, with one-day time attachment. The motor is of the gravity type.

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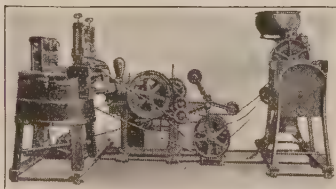
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(Continued from Page 218)

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Sherwin-Williams Co., 629 Canal Road N. W., Cleveland, Ohio.
Standard Stained Shingle Co., 1022 Oliver St. No., Tonawanda, N. Y.
Transfer Stained Shingle Co., 166 Main St., No. Tonawanda, N. Y.

Stucco.

Atlas Portland Cement Co., 30 Broad St., N. Y.
National Kellastone Co., Room 503, Asso. Bldg., Chicago, Ill.

Vacuum Cleaners.

Kewanee Private Utilities Co., Kewanee, Ill.
United Electric Co., 10 Hurford St., Canton, O.

Varnish.

Berry Bros., Detroit, Mich.
Bridgeport Wood Finishing Co., Box 103, New Milford, Conn.
Forest City Paint & Varnish Co., Cleveland, Ohio.
Lowe Bros., 465 E. 3d St., Dayton, Ohio.
Pratt & Lambert, 121 Tonawanda St., Buffalo.

Wall Board.

Beaver Board Co., 212 Beaver Rd., Buffalo, N. Y.
Heppes Co., 4504 Fillmore St., Chicago, Ill.
N. W. Compo Board Co., Minneapolis.
Philip Carey Co., Cincinnati, O.
Upson Co., 3 Upson Point, Lockport, N. Y.

Water Supply System.

Kewanee Private Utilities Co., 123 So. Franklin Ave., Kewanee, Ill.

Window Hangers.

Casement Hdwe. Co., 516-9 So. Clinton St., Chicago, Ill.
Kees, F. D., Mfg. Co., Box 102, Beatrice, Neb.
Phenix Mfg. Co., 048 Center St., Milwaukee, Wis.
Watrouse-Acme Mfg. Co., 520 S. W. 9th St., Des Moines, Iowa.

Wood Stain.

Berry Bros., Detroit, Mich.
Bridgeport Wood Finishing Co., Box 103, New Milford, Conn.
Johnson, S. C. & Son, Racine, Wis.
Sherwin-Williams Co., 629 Canal Road, Cleveland, Ohio.

MISCELLANEOUS.

Clothes Dryers.

Chicago Dryer Co., 628 S. Wabash, Chicago, Ill.

Furniture.

Sterling Furn. Co., 1510 Sterling Bldg., Toledo, Ohio.
Quality Furn. Co., 1155 Shepard Bldg., Grand Rapids, Mich.
White Sales Co., Dept. C, Bucyrus, Ohio.

Medicine Cabinets.

Hess Warm. & V. Co., 1217 Tacoma Bldg., Chicago.

Model Wardrobes.

John Thomas Batts, Grand Rapids, Mich.

Refrigerators.

Grand Rapids Refrigerator Co., 138 Clyde Park Ave., Grand Rapids, Mich.
McCray Ref. Co., 619 Lake St., Kendallville, Ind.

KEITH'S MAGAZINE

ON HOME-BUILDING

M. L. KEITH, Editor and Prop.

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Just a Word

As a City Is Planned

The story of Canberra, the new capital city of Australia which that government is building part way between Sidney and Melbourne, has an interest in showing how a city may be planned, instead of being allowed to "just grow." It will be of even more interest in later years to see in what proportion the natural growth is influenced by the conditions which are now being established.

The government owns the land and no part of it is ever to be alienated from the municipality which is established. Do you realize what that will mean to the city when it shall have reached the proportions of a great city, the capital of a powerful province?

The city of Canberra was completely planned as to main thoroughfares, business, residence and industrial districts, before the ground was broken. The business streets have direct communication with each other, with the outlets of the city, and with transportation facilities. The residence districts are not far removed, but are secluded from the noise of traffic, with narrower curving streets, which do not invite the teamster. They are dotted with parks and playgrounds, and they are expected to be so unbusinesslike in plan that they shall not be invaded by commercial interests.

The official building of Canberra is under the direction of an American, who won the commission, in addition to the first prize, in an international competition, in which the second prize went to a Finlander and the third to a Frenchman. The work was well under way at the beginning of the great war, which has delayed some of the big projects.

The early Americans were very wise in the way they planned the city of Washington. Suppose they had also taken up all the land which a great city should cover and have deeded it to the municipality with the restriction that no part of it should ever be alienated from the city. Ground leases would have taken the place of deeds to the land. Imagine the wealth of such a city after it had, through some kind of a sinking fund, repaid the initial outlay. With the increase of land values owing to the growth and development of the city, the increasing rents would furnish money for the city's growing needs. When the streets were to be paved and lighted there would be money to do it, with no grumbling from taxpayers, who felt that the man on a good salary who owned not a foot of ground received the same benefit without paying any of the cost. As the city grew in size and the needs multiplied, the values would increase in proportional ratio.

KEITH'S MAGAZINE

ON HOME BUILDING

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What may be done with Wysteria.

KEITH'S MAGAZINE

VOL. XXXIV

OCTOBER, 1915

No. 4

The Modern Wayside Inn

How to Turn a Neglected Farm House Into An Attractive Money-Making Tavern, and Do It Cheaply

William B. Powell



It is rather surprising that more people do not appreciate the value of opening a Wayside Inn or Country Tavern at convenient motoring distance from town. England, France—in fact nearly all European countries—are dotted with wonderfully attractive little places where one can stop in for daintily served afternoon tea, or a good

country dinner. These places are nearly always very simple and usually tiny. They are not elaborate or expensively furnished—and this is a point which Americans ought to remember. We are so prone to think that a restaurant or even a house must have a lot of money spent on it if it be attractive. It is so easy to fit out a little tea room inexpensively. What is



A wall or ledge screens your lawn from the roadway.



The porch may be utilized as a dining room.

more, if the proprietors have any business ability, it will net them a nice profit.

I know of three college girls who opened a small inn about ten miles from a

large city and took in a splendid income every month from April through October.

I know of another tavern situated about twenty miles from the same city and here



The office seems like a room in a private house.

a young couple, who run a small farm in conjunction with it, make a nice sum the year around. This couple took an old place which had been used as a stopping place in the old stage coach days, and by putting a thousand dollars and plenty of taste and common sense into its reconstruction, they have evolved one of the most popular inns in that section of the

An attractive inn furnished with taste and possessing that much desired element "atmosphere," will be readily patronized and will easily pay for itself.

Why not get a few people together and by each one putting in a little money and contributing a few pieces of furniture, china, or linen, start up a wayside inn? Select a farm house or cottage that is



The living room is a very attractive tea house.

state. A tennis court and access to the golf links of a nearby town, make this place very popular for week-end parties. In winter the court is flooded for skating and the surrounding hills are attractive to lovers of coasting and skiing.

There are many of these little places throughout New England, but the rest of the country has yet to get enough of them. Too often the motorist finds himself in prosaic surroundings for his meals.

located on a popular highway and if possible at a distance which will catch the trade of several towns. In renovating it, don't be tempted to spend too much money nor be side-tracked from your undertaking on this account. These stopping places do not have to have every modern convenience—in fact, you will find that many people would much prefer candle light to electric, and open fireplaces to steam radiators. Shower baths

will satisfy the guests and old-timey wash stand sets will do very nicely in the simple bedrooms.

I shall give you some hints for fixing an inn, many of which will be just suited to a place that you have in mind. Even if you or your friends are not interested in such a proposition, many of my suggestions are just as applicable to private homes as to public hostelryes.

lawn from the roadway and make it an attractive place for tea on a warm afternoon or for supper when the twilights are sufficiently long. You will note the wall of rough stones, the graceful trellises and arches, and the bird houses in the photograph shown, all of which add to the garden's attractiveness.

You can obtain more dining room space by utilizing a porch. Screens, plain grass



A good way to treat a low ceiled room.

In regard to the exterior, I suggest the liberal use of white paint. Almost any place will look inviting to passersby if it is painted white, with green shutters. You can't go wrong with this combination. Of course trees, a well-kept lawn, flowers, awnings, pergolas, etc., are great additions. But these things add up the expenditures, and if you go into them, you must keep your eye constantly on your money.

A stone wall or hedge will screen your

rugs, painted iron furniture and plenty of hanging baskets are all that are necessary to gain an appetizing eating place overlooking the garden.

These little taverns do not require a regular office—I have one in mind where the corner of the main room or lobby is the only "office" used. The small counter, candy and cigar stand are the only things which need suggest a public place, and these need not be emphasized. The old-fashioned, bright hollyhock paper

makes the office of one wayside inn seem more like a room in a private home, which, by the way, is the effect you should strive for in planning the decorations.

The main room should, if possible, have one or two open fireplaces as they will add greatly to the livability of your place. With the furniture grouped about the fireplace the guests will enjoy the cheery, homelike atmosphere, such as only a crackling log fire can radiate.

The living room of an exceptionally attractive tea house is shown in the photograph. The walls were painted a warm, light gray with modern "flat" wall paint.

The woodwork was painted ivory—also with "flat" paint. The old floors were left the same and a cheap but effective bright green grass rug was used. Except for the big comfortable couch, the rest of the furniture is wicker, or else plain, unfinished pine which has been painted black. The room can stand plenty of black because the chintz hangings have very vivid coloring and some of the upholstery and pillows are of bright colors. A novel effect has been obtained by cutting out certain patterns from the chintz and appliqueing them on black denim pillows. These designs have also been pasted on some of the black furniture, with over it a coat of shellac or water-proof varnish. In the case of tables a piece of glass was used instead. Electricity and heating was put in this tea house, although it is not necessary unless it is to be kept open until cold weather.

Another good way of decorating a low

ceilinged country room, whether it be for an inn or private home, is shown by the accompanying photograph. The effectiveness of this treatment depends solely on the design of the wall paper and the coloring used throughout the room. The



A certain tavern has renovated the old attic for a ball room.

old-fashioned, plain-tiled mantelpiece has been left as it was and the woodwork painted a pure, glossy white. The predominating colors in the paper are mauve and old blue, the latter color being used for the curtains and upholstery of the wicker furniture. High glass candlesticks with prisms add an old-timey touch.

If you want to go to the expense, you will find a ballroom has additional value in these days when dancing is so popular. A certain tavern, which is simply a renovated farm house, has its ballroom made from the old attic. The walls were plastered, new wainscoting and flooring added, but the beams were left intact, except that they were stained a dull green to match the new woodwork.

The bedroom problem is a very simple one. With paint and varnish, chintzes, old-fashioned wall paper (which can now be obtained cheaply) you cannot help but have attractive rooms. It is here that you can use your odd pieces of furniture and by staining or painting them make them match to form sets.

If you are an owner of an empty farm house or a motorist who longs for an inviting place to eat after a good run—why not interest yourself or some of your friends in this Wayside Inn idea?

The Maryland Cottages

"Such stuff as dreams are made of."

—Shakespeare.

Henry K. Pearson



HE Maryland cottages are famous. No one ever goes to Pasadena without going to see these charming cottages. "Dreams" they truly are; dreams in plaster and tile, all brodered and garlanded with trailing

of ground in the rear of Hotel Maryland and are part of that property for the accommodation of guests who desire quiet and retirement. In a general way, they are designed in sympathy with the architectural composition of the Maryland it-



In the court stands a magnificent camphor tree.

ferns and vines. Mr. Myron Hunt, the noted California architect, dreamed to some purpose when his fertile brain evolved these fair visions which have been materialized and embodied in plaster, brick and wood.

The cottages with the courts and gardens they enclose, occupy a whole block

self, which is unique among hotels. But the fertility of the architect's brain is shown in the variety of designs, for each one of the twelve cottages differs in its detail and in some essential feature from all the others.

The marked characteristics of the hotel exterior—the white plaster surfaces, the



The automobile entrance to the court.

columns, the pergolas, the wreathing vines, are reproduced in the cottages; but are so combined and so infinitely varied as to leave no impression of sameness or

monotony. A noticeable feature is the utter absence of the bungalow type. To build a group of one story cottages, in a land of bungalows without making use of



Brick is cleverly used with the plaster.

the bungalow idea, is certainly a notable achievement.

The illustrations presented show the inside facades of some of the cottages as they face the great central court with its flower bordered walks, its velvet sward, its pergolas and fountains, its beautiful plants and flowers. Through a wide window, we get a view from the inside of one of the cottages, looking out upon the space between two of the dwellings, with its wealth of flowering shrubs between the vine-draped walls.

In the center of one of the general inner courts stands a magnificent camphor tree; a great branching pepper, with its graceful, drooping sprays occupies a similar position on the other end. From the street side, the purple mountains rise before us, mysterious, alluring,—a wonderful vision. Surely, the California architect must needs be a dreamer of beautiful visions, to live up to the settings Nature gives him here. As one walks along the street side of these charming dwellings, suggestions follow quickly upon the heels of vision. Here high walls 8 feet from the sidewalk in places, shut out the too inquiring gaze. But these walls are hung with a wealth of foliage—ivy and the pink and white loveliness of the Cherokee Rose, which

"either side the door were

*Growing lithe and growing tall
Each one set a summer warder
For the keeping of the hall—
With a red rose and a white rose
Leaning, nodding at the wall."*

The Ficus Ripans creeps in and out among the ivy and the rose vines, broidering its lacy patterns on the plaster walls; ferns fill the boxes at the top of the parapet walls and bend over them. A dwarf orange tree stands green and glossy and straight in each corner of the walled

garden. Vine-wreathed case-ments open out on them from above and upon the pink geraniums and myrtle below, while the dark greenness of the ivy runs riot everywhere, over

*"Arch of door
and window-
mullion*

*Did right syl-
vanly entwine"*



View from a window.

Thus the street side of the cottages, almost overhanging the sidewalks, as they do, are given an alluring grace while so arranged as to shut out the gaze of the passer-by. One is reminded of the old Creole mansions in New Orleans, except that here is none of the frowning severity of the high walls and closed gates. The sense of privacy and of seclusion is here—but here the court yard smiles at you from between the walls, the garden beckons through the columned openings and vine-covered trellises.

There is a finely molded cornice here, a rounded column there, narrow slits of minaret and windows high up in a gable give a touch of romance. There is a glimpse of a pink oleander above the top of the wall. These are the things that make up the interest and the charm of the Maryland cottages. And from there, one carries memories which may be fertile in suggestions for other cottages in other scenes.

Two Women Architects

Virginia Shortridge

Having received the technical training, a woman should know how to build a house. His home may be a man's abiding place, but a woman lives in her home and its smallest details are momentous to her. As women are gradually entering the various professions and lines of business the woman architect is becoming known. Some enter the profession as do many men from some other door than that of the school. While a large proportion of women architects have had the best available school training, a few begin as draughtsmen and "graduate over the drawing board" as do so many men in the profession. A few first take an interest in plans and elevations through building which is done for them, and which rouses their enthusiasm and ambitions.

This article continues "Two Women Architects," begun in the September number, concerning the firm of Lois L. Howe & Manning, Architects, of Boston, and their work. Miss Manning began her career as a draughtsman in Miss Howe's office, and has continued it with study and travel.—*Editor.*

EVERY line in the composition of the elevation for a house should lead up to the central idea of home and there should be unity and harmony in the exterior, as well as practicability and proportion in the interior planning. One can not put a number of radical forms together that have no relation to each other, nor to the whole construction and achieve satisfactory results.

In beauty and character lie the gist of all design. Technical conditions if fully understood, fairly met and frankly acknowledged, are sure to give character to a design; and these conditions were met by this firm of women architects when cutting through the two fine old colonial houses in Park Street, Boston, to make a connecting floor for new kitchens and dining rooms in the reconstruction of these houses for the Mayflower Club.



A small dining room in the Mayflower Club.



A house in Brookline.

The view of the small dining room of the Mayflower Club shows the fine colonial treatment carried throughout the club rooms.

The house in Brookline which is shown is very simple yet charming, with its stucco surface, and charming glimpses of glassed in porches through the clambering vines. The setting of a house, the frame in which it is seen, counts for as much in a community, oftentimes, as the beauty and fitness of the building itself.

"Each for all and all for each other" is what the owner of a new house

should bear in mind. In this young country with the inartistic laying out of village and country streets resulting from the absolute lack of thought in the matter, the many pretty houses are often like good pictures in poor frames.

Then the exterior coloring of a house makes for pleasure. Since color - vibration stimulates, depresses, enervates or uplifts why forget the importance of this when building?

Many people are as sensitive to color as to sound, and are made wretched or happy by its use.

Miss Helen Keller, the deaf, dumb, and blind



The dining room gives a charming vista.

girl, has among her other wonderful achievements the knowledge of color by touch and has tastes more strongly developed than the average human being who has all his senses. She knows by her sensitive touch the color of her dresses, whether blue or black or brown, and she can pick a white rose or a pink rose in her garden, with never a mistake. She will, they say, do more. She will enjoy the pink one for one quality, the white rose for another.

it. The fireplace, too, is on the simple lines of the colonial days. It is a room where a child may feed his dreams with fairy tales on a rainy day, with a sun room beyond for the crisp winter mornings.

Concerning modern conveniences and the lack of them in England, Miss Manning commented on the seeming ease with which the English matron gets along without them. During a somewhat prolonged stay in England, quite recently, she was greatly puzzled on noticing that,



Chintzes give a touch of color in the child's room at Wonolancet.

Gay chintzes give a touch of color to the group of interiors at Wonolancet, Knollcroft, New Hampshire, which are here shown. The rooms are very dainty and charming. The view of the dining room gives a charming vista as seen through the open glass doors. As in so many New England houses, the fireplace end of the dining room is panelled to the ceiling. The fireplace itself has a very simple colonial treatment, with a single white panel over the chimney breast. The child's bedroom at Wonolancet is wonderfully attractive with its group of small-paned casement windows and the brightly colored chintzes as well as the comfy, cushioned window-seat beside

whereas English homelife may have given us the model of what sweet domestic living can be, our English cousins have been able to produce this perfection with so few of the modern contrivances deemed by us to be essential attributes to the comfort of any home. At many well served luncheons and dinners where she was among the guests in London, not only was there no butler's pantry, but it frequently happened that there was also no lift. The perfect smoothness and quiet gave visible proof that such deeds of courage were daily accomplished without the knowledge or the lack of contrivances for comfort which are found in very small apartments of exceedingly low rent and



With a sun room beyond the child's room at Wonolancet.

which are usually required in America.

The Lynn house, Miss Manning has placed charmingly and its exterior will doubtless add new beauty as the landscape work matures. The house has dignity and charm, two of the great essentials.

Through all time the quest for beauty

has spurred on the artist, the architect, the poet, to his greatest effort. But beauty is not easy to command. It is so delicate a quality,—so complex in its elements—a question often of such nice balance and judgment—that we can not weave technical nets to catch so sensitive a butterfly.



The Lynn house is charmingly placed.

Three-Story Houses for Less Than \$5,000 Each

Charles Alma Byers



EACH built for less than \$5,000, the three two-story houses here shown possess many points that should commend them to the careful consideration of the person who may be contemplating the building of a moderate-priced home, especially if consider-

variety of choice that should assist very materially in enabling one to reach a decision as to the type of house most desired.

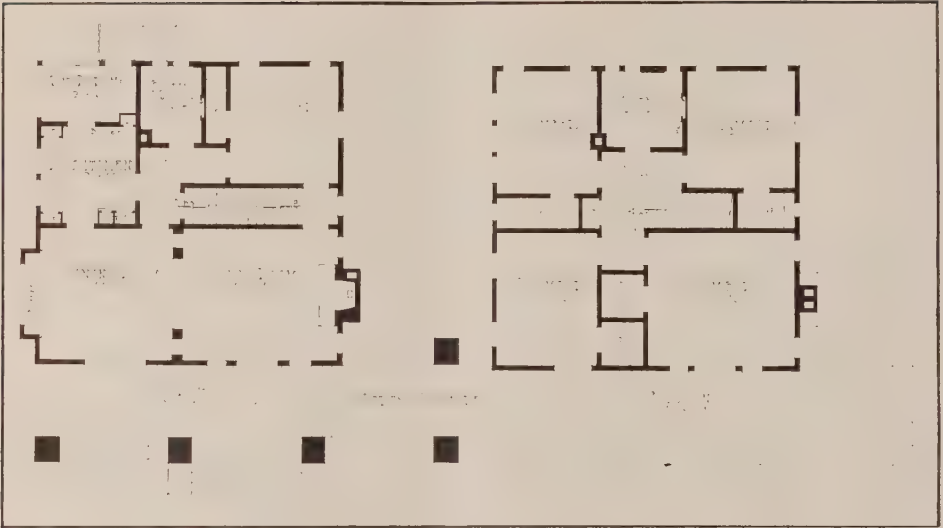
The first of these houses is of the so-called Mission style of architecture, and is the least expensive to build. It is digni-



It is dignified in structural lines.

able room be required. They are full two stories in height, and they are roomy and conveniently planned. Moreover, they are substantially constructed and modernly equipped, and they possess many special features, particularly of the built-in furniture kind, that will undoubtedly please the most exacting housewife. Being, also, of widely different designs in the matter of architecture, they afford a

fied in structural lines, and is decidedly attractive in outside appearance. Its exterior walls are sheathed, which is covered with heavy building paper, and over this comes the metal lath and the cement plaster, the latter being of unusually excellent quality and virtually pure white. The center portion of the roof, which is quite flat, is covered with composition roofing, but the cornices, as well as the



miniature roof projection over the front steps, are covered with red tile. The porch railing, which is of wood, and the trimming around the doors and the windows, except the main entrance door on the front—which, including the casing, is of mahogany—are painted white, to match the cement walls.

A veranda, nine feet wide, extends across the front of the house, which terminates at one end in a porte-cochere. This veranda is floored with dark red cement, to correspond with the walks and the steps, and into one end of it lead steps from the porte-cochere portion of the driveway. Extending the full length of both the veranda and the porte-cochere, overhead, is an excellent balcony, which comprises an especially delightful feature and adding to

the livable qualities of the home.

In the rear of the house is a small garage of exactly the same style of architecture as the house itself. Underneath the center of the house is a basement, which is walled with concrete and floored with cement, and a hot-air furnace located here supplies heat to the rooms whenever required.

The first floor rooms are living room, dining room, kitchen, bathroom and one bedroom, besides the usual rear screened porch, and on the second floor are four bedrooms and a bathroom. The living room possesses a large fireplace, mainly of tile construction, and in the dining room is found an artistically designed buffet, while each of the five sleeping rooms contains a roomy closet. A small linen

Estimate of Cost.
House No. 1.

Excavating	\$130.00
Lumber	770.00
Sash and doors.....	125.00
Tinwork	40.00
Hardware	85.00
Hardwood floors	187.00
Furnace	125.00
Electric wiring	46.00
Electric fixtures	75.00
Carpentry	655.00
Masonry	180.00
Mantel	40.00
Plastering	560.00
Plumbing	425.00
Painting	300.00
	<hr/>
	\$3,743.00

closet is also a feature of the second floor hall, and in each of the bathrooms is a tiny medicine chest, while the kitchen possesses all of the customary conveniences. The staircase to the second floor makes its ascent from a short passageway intervening between the living room and the first floor bedroom, and the stairway to the basement descends from the hall leading off from the dining room. In-

and the walls of the bathrooms are finished with a hard-finished plaster wainscot.

This house was designed by the De Luxe Building Company of Los Angeles, California, and was built in that city for \$3,743, an itemization of which is here given. It is warmly constructed, and should prove suitable for almost any lo-

The second house may be broadly de-



It is a very practical type of a house.

—Frank M. Tyler, Architect.

cidentally, the sleeping room on the lower floor may be used either as a servant's room or as a children's nursery.

The woodwork of the living room and the dining room, which rooms are connected by a broad colonnade opening, is of pine given a mahogany stain and finished to be in keeping with mahogany furniture. The remaining rooms are finished in enameled white. The walls of the two rooms here mentioned and of the four second floor bedrooms are papered,

scribed as belonging to the English school of architecture. It is a very practical type of house, and the representative of the style here shown presents a particularly attractive appearance. Resawed weatherboarding covers the walls of the first story and shingles those of the second, while the gables are of stucco finish, with half-timbered effect. The walls are painted green, and the trimming is done in green of darker shade, while the stucco is tinted a deep cream shade. The

porch masonry is of artificial stone, of a color to match the stucco; the chimney is of red brick, and the roof, also painted green, is shingled.

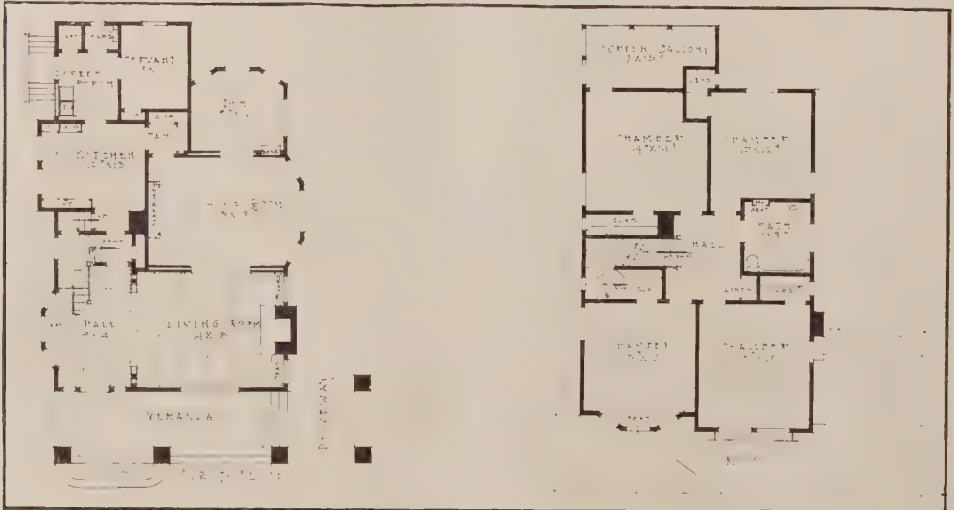
As of the first house, a deep veranda, terminating at one end in a portecochere, extends across the entire front. This veranda is floored with cement, and is cov-

Estimate of Cost.

House No. 2.

Excavating and masonry.....	\$500.00
Lumber	750.00
Millwork	300.00
Sash and doors.....	370.00
Hardware	120.00
Sheet metal	150.00
Hardwood floors	200.00
Plastering	215.00
Plumbing	250.00
Carpenter work	950.00
Wiring and fixtures.....	200.00
Painting	375.00
Screens	25.00
Mantel	75.00
	<hr/>
	\$4,480.00

entrance hall, from which rises the staircase. On one side is a bay of three windows, which possesses a built-in seat, and on the other side a broad colonnade opening, hung with portieres, leads into the living room, while from the rear end, at one side of the staircase, leads a passageway that connects with the



ered by its own individual roof. It provides both a charming entrance and a delightful outdoor retreat.

The interior of this house is especially well planned, and its numerous built-in features make it truly delightful. The plans will, in fact, bear the closest inspection, for it would be extremely difficult to improve upon the arrangement, size and cost considered.

The front door opens into an inviting

kitchen and contains the basement stairway and a closet for wraps. The living room contains a fireplace, with a brick mantel, to the right of which is a built-in seat and to the left a built-in bookcase. Sliding doors separate the living room from the dining room, and a single door of the same kind intervenes between the latter and the den in the rear. The dining room possesses an excellent buffet, and the den has a built-in writing desk.

Between the dining room and the kitchen is a small pantry, with its cupboards, and from the kitchen rises a back stairway to the second floor. A servant's room comprises the remaining room on this floor, and off of the usual rear screened porch are a toilet and a storage closet.

On the second floor are four bedrooms, a screened sleeping balcony and bathroom. Each of the inside bedrooms has a large closet, the bathroom contains a built-in seat and a medicine chest, and hall possesses a linen closet, with shelves and drawers. One of the front bedrooms also has a window seat, located in a bay.

The woodwork of the entrance hall, living room, dining room and den is of pine, stained to resemble fumed oak in color. The ceilings of the first two are beamed, and the walls of the last two are finished with a paneled wainscot, with a plate rail above. The woodwork of the remainder of the house is enameled white, and the walls of the principal rooms are papered. Hardwood flooring is used throughout, except in the bathroom, where tile is used.

The house is heated from a basement furnace. It was designed by Frank M. Tyler, architect, of Los Angeles, Cali-

Estimate of Cost.

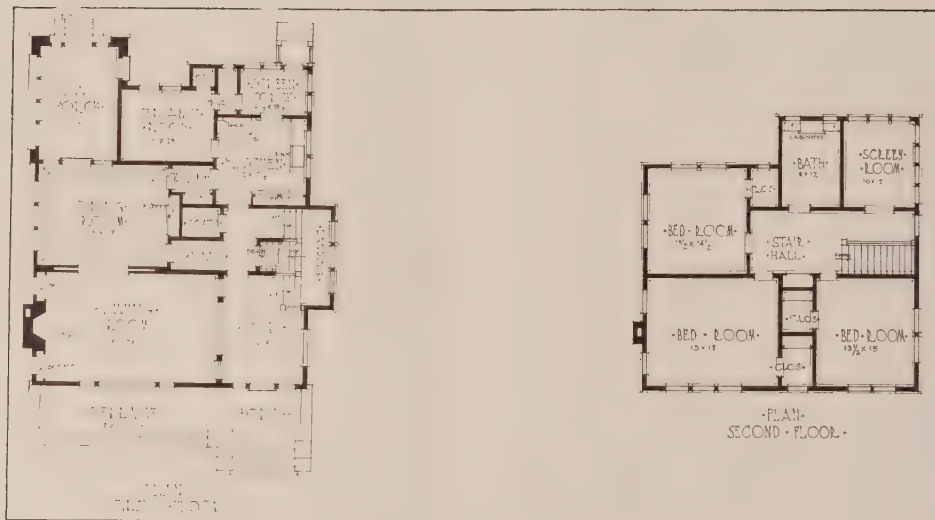
House No. 3.

Excavating	\$110.00	Plastering	205.00
Masonry	190.00	Painting	310.00
Cement floors and walks.....	85.00	Hardware	150.00
Lumber	1,170.00	Mantel	55.00
Sash and doors	235.00	Tile floors	100.00
Carpentry	995.00	Hardwood floors	190.00
Plumbing	305.00	Electric fixtures	155.00
Wiring	95.00	Shades	50.00
Heating	145.00	Linoleum	45.00
Tinwork	75.00		
			\$4,665.00



The entrance is especially charming.

—E. B. Rust, Architect.



fornia, and was built in that city for \$4,480, of which a tabulated statement is given.

The third house shows a Californian's attempt at blending two distinct types of foreign architecture—the Swiss chalet and the Dutch Colonial. The outside walls are covered with split redwood shakes, which are stained a reddish brown color, and the roof is shingled. The exposed masonry is of red brick, and the roomy front porch and terrace, extending entirely across the front, is floored with cement, while the foundation is of concrete. The entrance is especially charming.

Here again the front door opens into an entrance hall, and there is a somewhat similar arrangement of staircase and connecting hall as is shown in the plan of the second house. The large living room has a fireplace, of brick construction, with a built-in bookcase at either side. Sliding glass doors separate this room from the dining room, and connected to the latter by a colonnade opening is a de-

lightful sun-room. The dining room has the usual built-in buffet, and between this room and the kitchen is a small pass-pantry. On this floor is also a servant's room, besides the customary screened porch in the rear.

On the second floor are three bedrooms, a screened sleeping room and the bathroom. Each of the inside bedrooms has a closet, the bathroom two medicine chests and a built-in seat, and the hall a small linen closet.

The woodwork of the entrance hall, living room and dining room is of pine, finished to simulate weathered oak, and the remaining rooms are finished in white enamel. The entrance hall and the two rooms here mentioned, as well as the three bedrooms, are papered.

The house has a basement underneath the center, and the rooms are heated from a furnace. E. B. Rust, architect, of Los Angeles, California, was the designer, and the cost of the house was \$4,665, as shown in the tabulated estimate.

Fruit in the Home Garden



HOUSE is never a home until guarded by trees, seconded by shrubs, and tied down with vines and creepers." People have come to accept the aesthetic and even the commercial value of shrubs and vines. A house is not considered completed until the planting has been done. Much

a city lot, and decides to live there for a few years. He will select the finest varieties of the fruits which his family like best to eat and plant one or two of each as the case may be, so that he will have at his door the fruits his family wish to use. These fruits count as part of the shrubbery and planting about his house.



Grape vines supply a shaded walk in summer and fruit in autumn.

time and study is devoted to the cultivation of vines and shrubs. The Department of Agriculture comments with surprise on the lack of attention given to the home fruit gardens, even by those who have suitable situations and facilities for raising fruits, and who are unable to purchase them readily because markets are not accessible. A mid-western farmer goes to southern California, buys a small fruit ranch, or even

In any part of the country fruits do not require much more care than shrubbery. Now that strawberry and raspberry plants have developed so that they bear fruit from early spring until the frost comes, any little plat of ground will repay its cultivation. A few plants of each variety will bear all of the fruit which a small family will use, from day to day. What other planting could be more beautiful, in the spring than an ap-

ple, peach or cherry tree, even though they are not "neat" when the blossoms are falling?

Americans are notably a fruit loving and fruit eating people. A fair proportion of them have a little plot of ground at their disposal, and some planting. Notwithstanding these facts, fruit culture has come to be classed with the specialties, and few people who consume fruit are actual fruit growers.

The cultivation of fruit teaches discrimination in the choice of fruit. If every purchaser were a good judge of the different kinds of fruit, there would be a greater demand for fruit of a high quality. The cultivation of fruits in the home garden would do much toward teaching buyers to discriminate between the good and the inferior varieties of fruit.

As one's interest and knowledge in the growing fruits increase, their care, rather than becoming a hardship will prove a pleasure instead. The city man who spends most of his time in a stuffy office, will find in his fruit garden, healthful employment and he may develop that delightful thing, a hobby.

Horticulturalists tell us that in proportion to their size, dwarf trees are more fruitful than standards; they come into bearing sooner and are therefore of special value for use in fruit gardens. At planting time all broken or decayed roots should be cut away, leaving only smooth



What is more beautiful in the spring than a fruit tree.

cut surfaces and healthy wood to come in contact with the soil. If a large part of the root area of the plant has been lost in transplanting, the top should be cut back in proportion to the roots remaining. By so doing the demand made by the top when the plant starts into growth can be met by the root.

The holes in which trees, vines or shrubs are to be set should be ample, so that the roots of the plants may have full

spread without bending them out of their natural course. The earth at the bottom of the holes should be loosened a spade depth below the line of excavation. The soil placed immediately in contact with the roots of the newly set plant should be rich top soil, free from sod or partially decayed organic matter. Firm the soil over the roots by trampling, as this brings the soil particles together and at the same time in close contact with the surface of the roots. A movement of soil water is thus set up and the food supply of the soil brought immediately to the use of the plant. When the operation of transplanting is complete, the plant should stand one or two inches deeper than it stood in the nursery.

A cozy summer veranda may be covered by grape vines, thus securing the double advantage of a cool, shady nook during summer and a supply of fruit in autumn.

The Two-Family House

The Salem Group



HE housing of its people in a livable manner is one of the gravest problems which is now facing any community. A certain proportion of the people are independent. They own, or they purchase, a plot of ground and upon that they build such a home as they choose and are at the same time able to finance. In closely built re-

In this way the two-family house has been evolved. In group planning the houses are not all set at the same distance from the street, and so do not shut out the light from each other to a great extent. The planning and placing of a group of houses brings into consideration a number of problems which many home builders do not think about until the in-



Group of two-family houses at Salem, Mass.

—Kilham & Hopkins and
Philip Horton Smith, Architects.

gions, where the available lots are small in size, individual homes are too close together to have a sufficient sunlight and air, unless the people of a community cooperate in the placing of their houses so that each shall interfere with the other as little as possible. If a house is placed at the lot line on one side it gives all of the available space on the other side of the house. Two houses adjoining in a party wall may be much better lighted in this way with windows on only three sides than if each were set in the center of its own lot, and only a few feet of ground between.

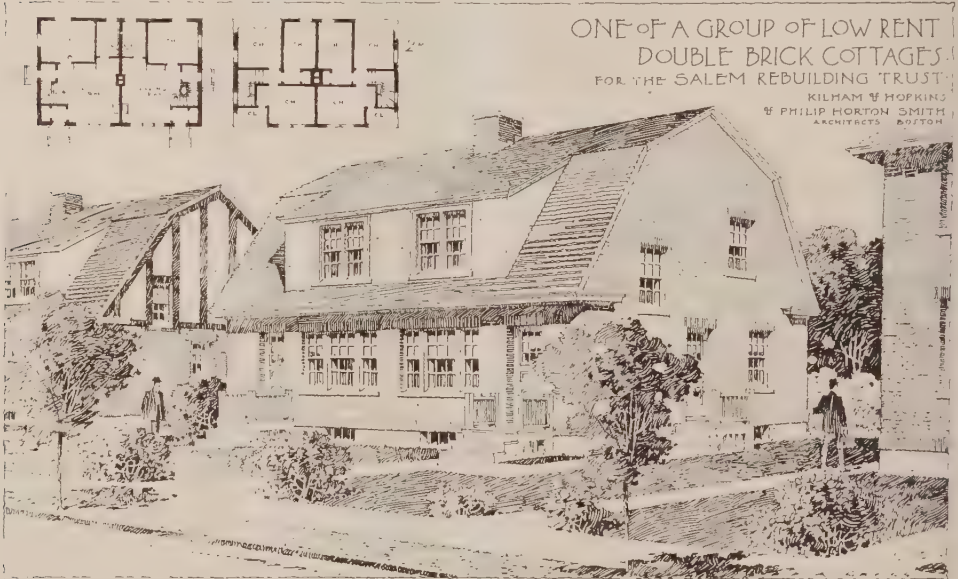
dividual house is built and the neighboring house is placed beside it.

Realizing this fact, several communities and "foundations" have undertaken to develop some of the possibilities of group planning. The results are proving to be of great interest to the home builder as well as to the people who rent or who build for investment.

Following the great fire which swept the industrial section of Salem, Massachusetts, more than a year ago, leaving homeless a large proportion of its population, the Salem Rebuilding Trust undertook the problem of housing these people

and of rebuilding the industrial districts of Salem, utilizing the best thought and study which has been given to this subject. To Messrs. Kilham & Hopkins, architects, of Boston, was intrusted the planning of this district. The view of the group of houses here shown, gives in a general way the solution of the problem which was reached, and which as the houses are completed and occupied is proving a real solution, practical, econom-

and the other giving five rooms to each family. Each house is as completely independent as though there were two brick walls and two feet and a half of unoccupied ground between them instead of only one fire-brick wall. Windows would be no more impossible or useless in one case than the other. The larger unit makes a better looking neighborhood, and the placing on the ground gives the maximum of light and air to each.



Two-family house with four rooms each.

—Kilham & Hopkins and
Philip Horton Smith, Architects.

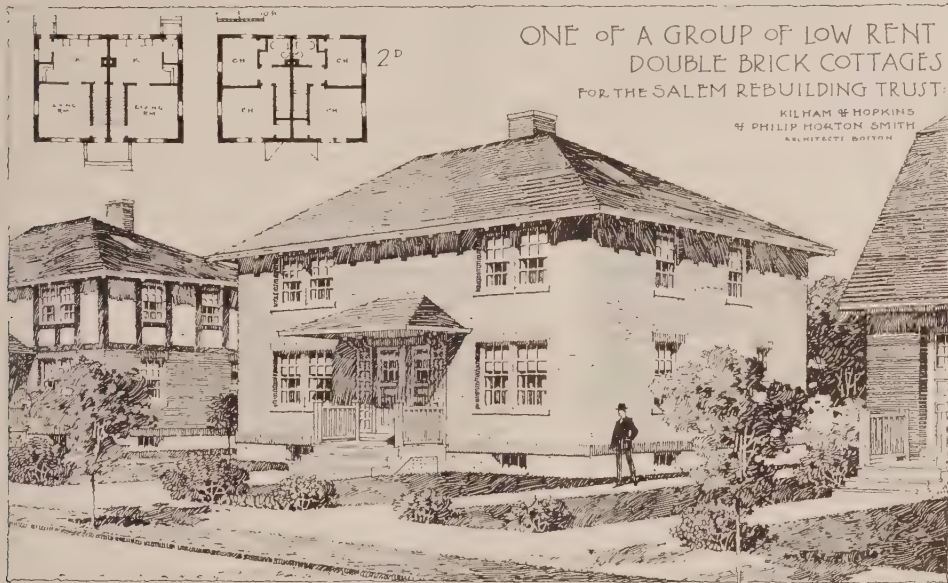
ical, and filling the needs in a fairly satisfactory way.

It was not a new problem to these architects. In the suburbs of Boston they had already completed the development of a community or garden city group, where the houses were fireproof, brick and tile construction, and completed for very moderate prices, while making extremely attractive homes.

In the Salem group, two-family houses are used. Sketches and plans of different types of the two-family house are shown, one house giving four room apartments,

Each family has a separate house and yard and has a home privacy almost equal to the old-fashioned village life in New England. These dwellings are built of brick, with slate roofs, and answer the most rigid requirements of the fire limit restrictions of Salem, which are now more rigid than many other cities of the metropolitan district.

These low cost, fireproof houses in Salem are now, many of them, completed and occupied. Good business judgment of the trustees and the skill of competent architects combined have produced these



Two-family house having five rooms each.

—Kilham & Hopkins and
Philip Horton Smith, Architects.

model dwellings, which are literally models, because they can be duplicated by others profitably and will be better permanent investments than the old style frame tenements. Others are already copying these houses.

The cost of each double dwelling is \$3,775, and the land is \$280, making \$4,055 for each two-family dwelling. This is \$2,027.50 per family and is not more than the usual cost of housing for the small family.

It is the intention of the commission to rent each tenement at a price not exceeding fifteen dollars per month. These rentals are no higher than those paid by the industrial workers before the fire, for frame tenements.

Our cities are being filled with more or less expensive apartment houses where small families are crowded together side by side and tier on tier. The apartments are luxuriously appointed. The tenants have every convenience. It is an easy way to live. But the apartments are built on the same basic principles as the tene-

ments in the slums; to give as many rent-paying units as possible within the building limits of the property. Many of the hastily built, new apartments will degenerate in a few years into tenements, depreciating the value of the neighboring property. Realizing this, those who are studying the housing problems are developing other ways in which people may live with no larger rentals than they now pay for an apartment in a flat or multiple-family house, and yet have the independence of the individual house. One solution is found in the two- and three-family houses, especially as they form part of a group plan. Each has its own bit of grass and garden. Only one family lives within the four walls, which may very easily be fireproof. No other family is overhead. Through the co-operation of the community the heating and attendance may be arranged as easily as in an apartment. The planning and building of a group of houses results in a very great economy in the cost as compared with the building of the individual house.

We are beginning to understand and realize the truth that housing is the most important single business enterprise, and that it represents the largest investment of our wealth. It affects us all and demands our best collective judgment and business enterprise. Once we indifferently thought it was none of our concern. Now we recognize that whether we will or not, we are practically members of a

great co-operative housing company which takes our rent moneys and keeps us supplied with a place to live. When we once realize that we pay the bills for all this unsightly and wasteful building in our communities, we will demand that our money be used to provide buildings of a permanent character, and which really give us the living conditions which we desire.

A Gambrel-Roofed House

THE term "old-fashioned" has lost its odium and when applied to a house has acquired a sense of the quaintness of the New England house, which has been good enough to out-live its generation. We find that quality in this gambrel-roofed house, of which we have only a pen and ink sketch, but which makes a charming picture.

We associate the gambrel roof especially with the work of the early Dutch colonial builders, but it has been largely

used because it gives almost a full-second story under the roof, with interesting possibilities in the projection of the eaves.

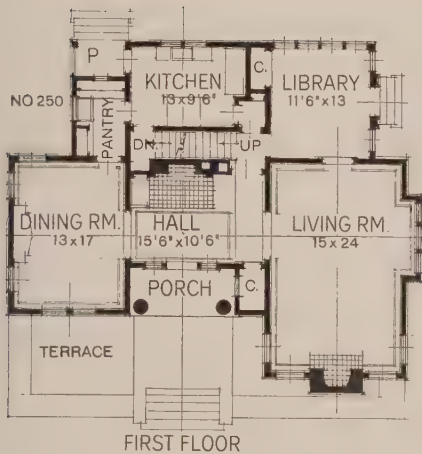
The entrance is from the porch, recessed under the main roof, into a reception hall with an attractive brick fireplace and built-in seats. There is a coat closet with outside light reached from this hall.

The living room is most attractive with its projecting bay and brick fireplace. The outside chimney extending up through the front gable relieves the front eleva-

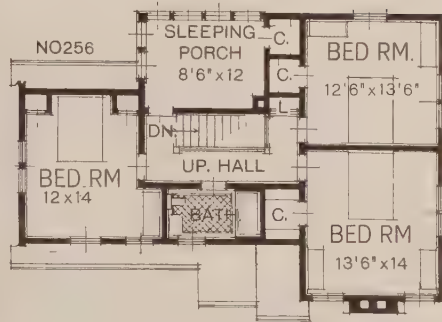


A pleasing old-fashioned house.

—John Henry Newton, Archt.



FIRST FLOOR



SECOND FLOOR

tion of what might otherwise have seemed commonplace, and adds a piquancy to the exterior.

Back of the living room is a fair sized room which is largely glass and on the plan this is called the library. It is really a sun room and with its outside entrance and good closet it would make a very convenient office or den for the man of the house. It is near enough to the kitchen that if desired it may be used as a breakfast room, though the doors between will prevent odors from reaching the front part of the house. On the other side the kitchen connects through the pantry with the dining room, which has good window grouping and a built-in buffet.

The fireplace and seat make the hall very inviting. The stairs, back of the fireplace, are easily accessible yet secluded

from the hall and connect so closely with the kitchen that service stairs are unnecessary. The kitchen has an outside entry. It is well lighted and conveniently arranged.

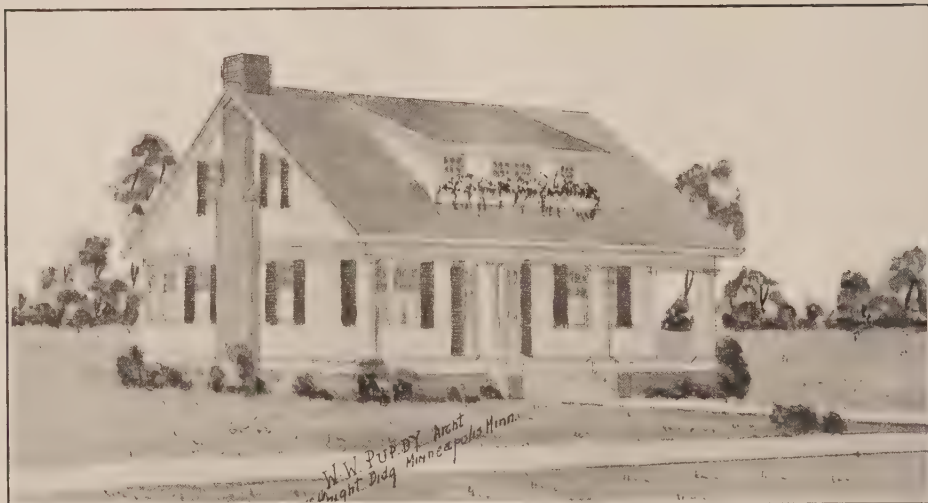
On the second floor are three good chambers, each with good closet room; a linen cupboard opening from the hall; a tiled bath room; and a good sleeping porch, which is fitted with a closet.

There is a full basement under the house with hot water heat, laundry, fuel and vegetable rooms. The foundation walls are of concrete. The exterior of the walls is of shingles or wide siding and is stained as is also the shingled roof. The architect gives the estimated cost as \$6,000, with hardwood floors, hardwood finish for the first floor and pine for painting on the second floor.

A Cottage on Colonial Lines

THIS country has never known a more reasonable mode of building nor one more beautiful than that practiced during the Colonial days. It was an adaptation of the English Georgian version of classic styles, to American Colonial homes. The details which

were originally intended to be used in stone were adapted to the Colonial building material, a soft wood which they almost invariably painted white. In the finer examples, Colonial details were very beautiful, and these details now stand to us for the Colonial style, which we have



With a porch the full width of the house.

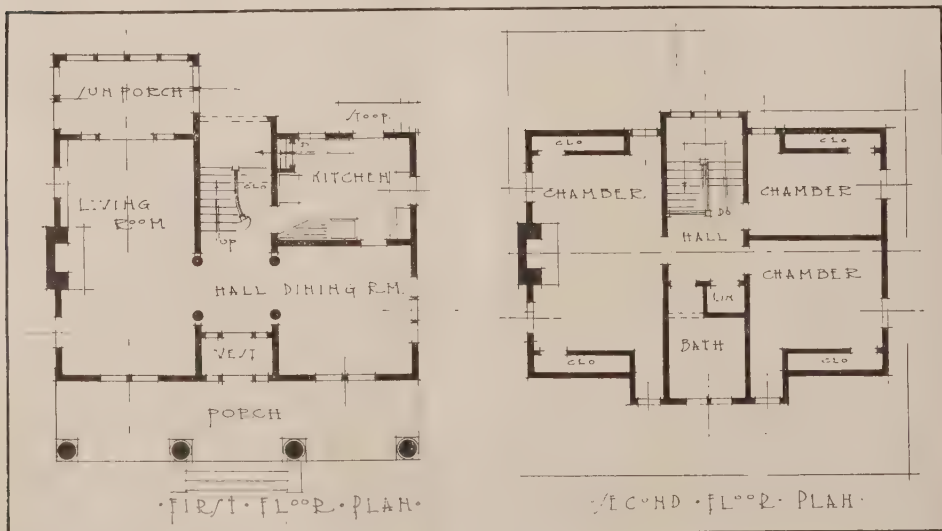
W. W. Purdy, Architect.

again adapted to our modern uses. A house which has well-proportioned columns with Doric capitals, especially if they are made of wood and painted white, we call a Colonial house.

The Colonial fathers never knew the luxury of a modern porch. They sometimes had a "stoop" or portico as a part

of the Colonial entrance. Yet this house, with a wide porch its full width we call Colonial because of its details; the columns and entrance, the white mouldings, the green blinds on the light wall, all bespeak the Colonial type of building.

A Colonial interior, when carefully carried out, is not less interesting than the



exterior. The wide central hall, generally with an outlook beyond, was a usual feature of the Colonial house.

In this case the windows on the stair landing give the outlook, while the space under the stair landing is utilized for the basement stairway from the kitchen, and may have a grade entrance if desired.

The whole interior of the house, with the exception of the kitchen, is done in white enamel, with doors of birch, stained mahogany. The hall gives the key to the interior and is one of the most interesting features, with its Colonial stairway, mahogany rail and treads, with the

white spindles and white risers, which tie into the white finish of the hall.

The fireplace in the living room has a Colonial treatment, with bookcases beside it. French windows lead to the sun porch, adding to the attractiveness of the living room. The kitchen is in pine, finished in the natural color.

The second floor has a large chamber with a fireplace, and two smaller ones, with the bathroom conveniently central.

There is a full basement under the house with a well-lighted laundry, furnace and fuel rooms, vegetable and fruit closets.

A Seaside Cottage



The planting is simple yet effective.

—George Palmer Tilling, Architect.

“VISTA DEL MAR” as this delightful little bungalow within view of the sea has been called, has a low pitched roof covered with composition roofing. This type of roof has become

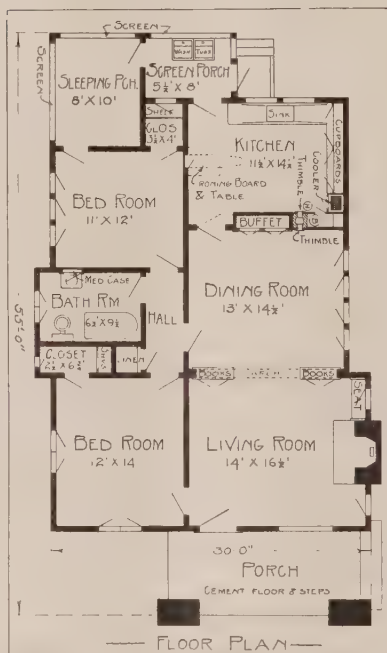
very popular on the Pacific Coast and is being used throughout the whole country.

The exterior walls are covered with half-length shakes. The front porch floor

and steps are of cement and the short porch columns are of cobble stones with cement caps.

One of the interior features which should not be overlooked is the screened sleeping porch which can also be used for a servant's room if desired.

The disappearing kitchen table and ironing board which is shown in the kitchen is a wonderful piece of furniture. The table can be used separately from the ironing board and both board and table can be folded up into the cabinet when not in use. The entire kitchen has been very carefully planned. The sink is well lighted with good tables.



Notice that the drain boards are shown without the unsanitary grooves. Set tubs on the screened porch make a convenient place for laundry work. A hinged cover closes over the tubs when not in use converting them into a porch table.

The dining room has a built-in buffet, and a good group of casement windows. Five foot book cases screen the dining room from the living room, which latter has a good fireplace with a projecting outside chimney. The treatment of the planting as shown is very simple, yet effective. A massing of color with the grass for background.

A Snug Little House

THIS "Snug Little Cottage" is worthy of more than a passing notice.

It is small and may be built at a low cost. The main part is 25 feet in width and 25 feet in depth, with a rear extension of 8 feet and a piazza at the left side 9 feet wide. It has one main living room across the front, which is 20 feet wide in the clear, and 12 feet 6 inches deep. The side piazza is intended to be enclosed with glazed sash and opens in connection with both the living room and dining room with wide glazed French windows. The finish of the first floor is Washington fir stained brown, and the floor is of natural oak. This same finish

is carried through the piazza and the walls and ceiling of piazza are plastered and given the same finish as the living room. There is one main chimney centrally located with a wide fireplace in living room, and flue for kitchen and furnace. The kitchen and dining room are conveniently arranged and have ample cupboard space. In the rear is a maid's room and a screened porch opens from the kitchen. The main stairs lead up at the right side of house directly in front of the vestibule entrance. The second floor has one large front chamber and two smaller chambers in the rear and a small glazed sleeping porch, which is



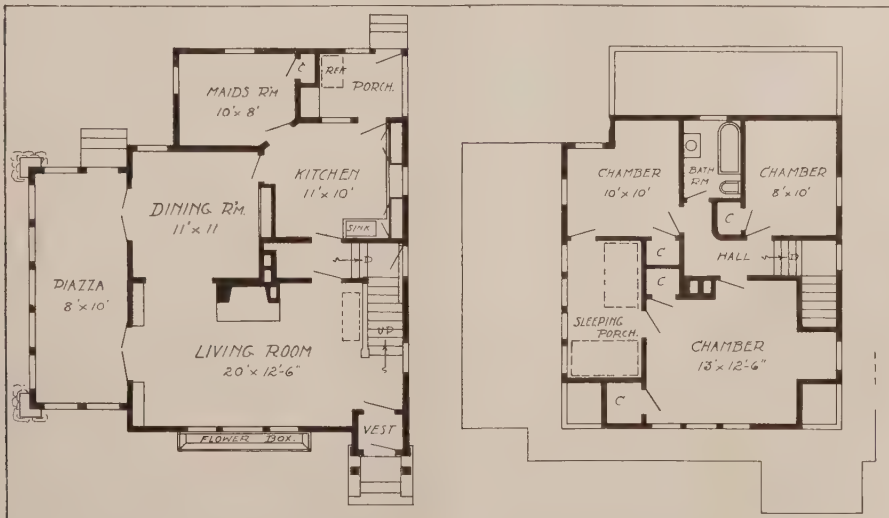
The sun porch opens from both living and dining rooms.

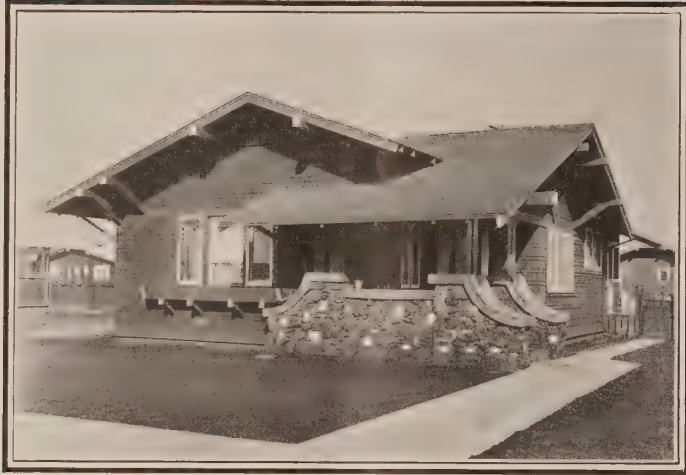
—Chas. S. Sedgwick, Archt.

connected with two chambers. The bath-room is in the rear over the kitchen. There are ample closets provided.

The basement is the full size of the house and has grade entrance from the basement stairs, which are under the main stairs.

The exterior is covered with cement stucco with pebble dash finish, and the roof is shingled and stained. The architect estimates that it should cost from \$2,200 to \$2,500 to build this cottage, exclusive of heating, plumbing and electric wiring.





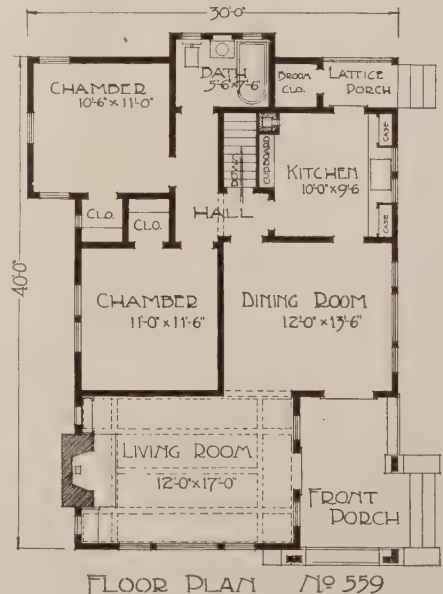
The entrance at the side gives an unbroken lawn. —Jud Yoho, Archt.

A Bungalow with Side Entrance

FIVE rooms, well arranged on one floor fill the requirements of the so-called, average family. The accompanying design adds to this a front and rear porch, and full basement. The corner porch gives entrance to either the living or dining room, and may be used from both. The fireplace makes the central feature of the end of the living room, with a case for books on one side and a box seat on the other side. Under the hinged cover of the seat may be kept the fire irons and kindlings. A beamed ceiling is indicated in the living room.

Both of the bedrooms have good closets and are convenient to the bath room while they may be secluded from the rest of the house. The bath room fixtures are very compactly arranged. A small latticed porch gives the rear entrance to the kitchen and has a good sized closet for refrigerator or storage. The kitchen arrangements are convenient and well lighted, everything right at hand and so placed that the best possible light falls

directly on the work in hand. There is a good cupboard beside the range. The sink is under the windows and convenient to cupboards on either side. Be



sure that the sink is set high enough.

The entrance steps to the porch are from the side leaving an unbroken lawn in front of the house. The porch walls and buttresses are here shown built of clinker brick which gives an unusual tex-

ture to the surface. The exterior of the bungalow is sided with wide and narrow boards alternating, and the siding is carried down to the water table just above grade. The wide projecting eaves are carried on brackets.

The Typical Bungalow

FROM this broad porch, with its clear sweep from corner to corner, unobstructed by columns, is given an unimpeded view, and free entrance of light and air. The massive exposed

handsome colonaded opening with built-in book cases. The kitchen is fitted with all of the conveniences. Walls and woodwork are enameled a glossy white, perfectly washable making it, as a kitchen



The wide span of the porch gives an unimpeded view. —Bungalowcraft Co., Archts.

chimney, solid porch work, and the overhanging eaves and gables all bespeak welcome and hospitality in unmistakable terms. The outside walls and roof are shingled, the porch floor and steps are of concrete. Inside the walls are of hard plaster tinted or papered as desired. The rooms are large and conveniently arranged with plenty of closets, cupboards, linen-press, etc.

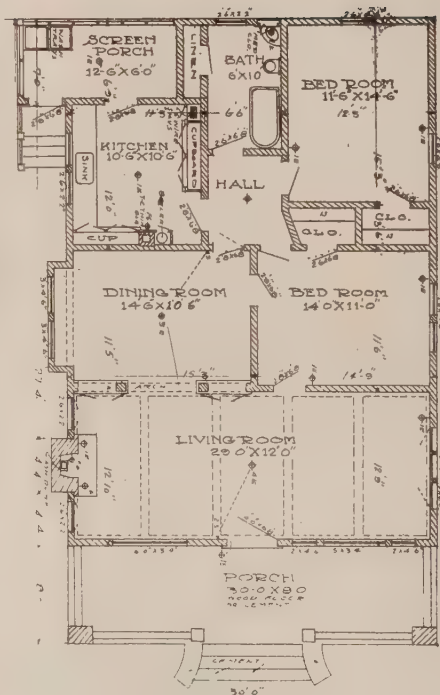
Dining room is wainscoted with plate rail and connects with living room by a

should be, one of the most attractive parts of the house.

The architect calls this a typical bungalow saying that it has without doubt, either as here shown, or with slight modification, been built more frequently than any other single type of bungalow, not only on the Pacific Coast but throughout the United States, and gives as the reason for its great popularity, the satisfaction it always gives as a quaint, cozy, comfortable home. The designers have

carefully studied the needs of the family and the ease of the homemaker.

This house is about 30 feet in width on a 50-foot lot. It has, the architect tells us, been built many times in California for \$2,000 and in the East with cellar and furnace for from \$2,500 to \$3,000 according to finish, etc. If desired the large attic may be utilized for storage or for two good bedrooms with closets. Stairway is arranged for by slightly reducing the sizes of dining room and bedroom, and windows are built in the gable ends if the attic space is to be utilized. A caution should be given here of the risk which the homebuilder takes when he attempts to build this or in fact any bungalow from pictures and without the carefully worked-out plans of the original designer. A line too long,—a wrong proportion,—an angle out of sympathy and your house joins the long list of architectural horrors which may be seen in every town and village. It costs no more to build a home that people will stop and admire,—one that they will show to their friends as “just about the cutest little home in this town” than the kind that your carpenter puts up “out of his own head” or attempts to copy from a picture. Carefully worked out plans



and complete specifications will save the home builder more than their cost in money and vastly more in the worry and anxiety which they save.

Homes of Individuality

Selected by W. J. Keith, Architect

THE charm of the unpretentious exterior is growing upon American home lovers. The house which retires from, instead of courting the public gaze is beginning to find favor. The simple stucco surface and gambrel roofs give a pleasing exterior to this house planned for a family of growing children. The rear stairs, which are so often omitted from the compact small house, are here

given additional use by including a grade entrance on the cellar stairs, which gives entrance from the arbor and playgrounds, connecting with a main floor lavatory and the second floor bedrooms. A mother with growing children will appreciate their being able to come in from play and wash or dress before entering the main hall or living rooms.

The fireplace in the main hall gives a



The house which retires from the public gaze is finding favor.

greeting, with the library on one side of the stairs and living and dining rooms on the other side.

Ample sleeping accommodations are arranged on the second floor. With maids' room off the rear stair hall, on the first floor, there is no possibility of the maids disturbing the household late at night, for their quarters are quite shut off from the rest of the house by a back hall arrangement.

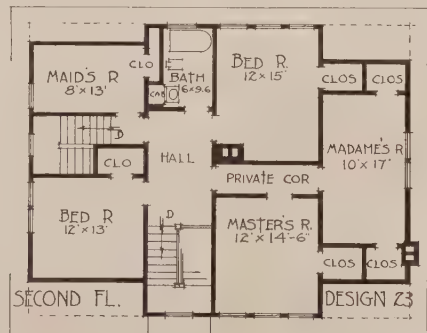
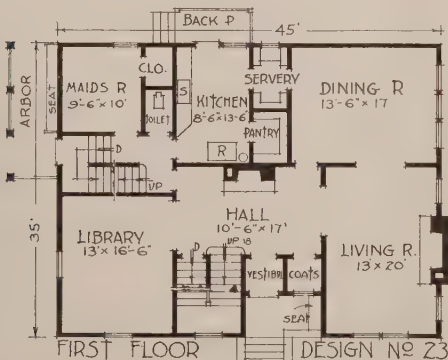
While the house is of good size the lines are simple and the construction economical, with a pleasing exterior.

A Small Home

In places where field stones may be obtained without great difficulty nothing

makes a more satisfactory and attractive building material. This small house shows field stones used in the walls to the heads of the windows and for the porch, with shingles above. The stone porch extends the full width of the house and is hospitable and inviting.

The interior arrangement is compact and good. The living room is especially desirable with its attractively grouped windows, and open fireplace in the rear wall. A box seat is built in between the stairs and the fireplace. The dining room is attractive with its glass door opening on to the rear porch, which could be easily extended if desired and be given a pergola treatment. A pantry, with generous cup-





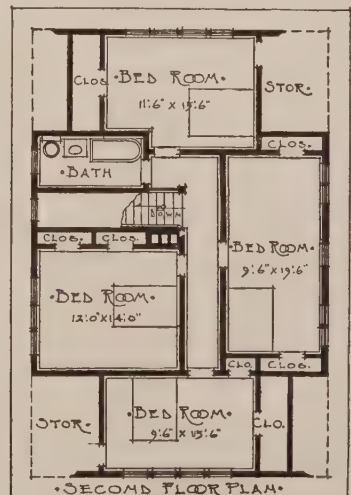
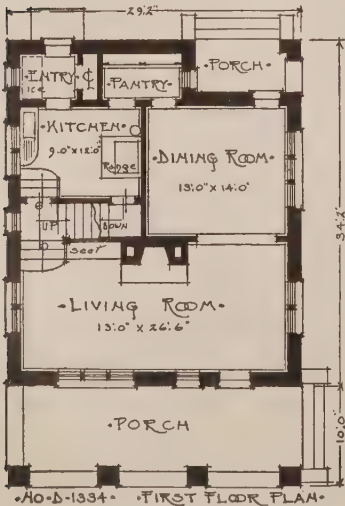
The stone porch gives an attractive entrance.

closet and refrigerator space is provided in the rear entry, and four steps to a platform on the main stairs gives convenient access to the front door and second floor.

The rooms on the second floor are all of good size and furnished with roomy closets. The room on the right could be

readily made into two smaller rooms if desired.

The basement contains a laundry, extra toilet room and cold storage closet. It extends under the entire house and has a cement floor.



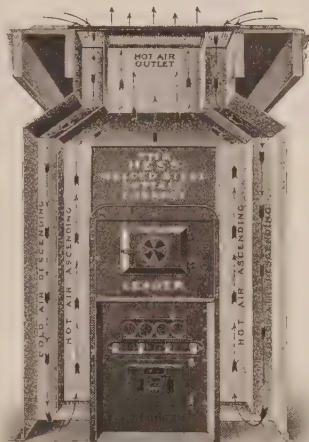
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The Management of Pattern.



ONE of the most usual ways of spoiling the effect of a room is to introduce too much pattern. It is not unusual to see a wall paper of distinct pattern, often of several colors, figured curtains, upholstery of quite another design, and a confusion of cushions and table covers, all more or less elaborately embroidered, all in the same room. Each may be exquisite in its way, but the effect of the mixture is horrible beyond the power of words to express.

If there is one thing more than another which I have for years been endeavoring to impress upon my readers it is that there is room in any room for just one decided pattern. If the furniture is figured, the walls and carpet must be at least approximately plain. If this rule, which is by no means of my own making, be followed, you may not achieve distinction in your furnishing, but you will avoid serious offense.

But like all rules, this one has its exceptions. If you study a fine Persian rug, or, for a more modern example, one of the wall papers or chintzes designed by William Morris, you will see examples of the combination of two distinct patterns. In the Persian carpet you will see the general outlines of the design worked out in two or three colors on a light colored ground, and the main spaces of the ground diversified by a small pattern, while very often the centers of the decorative forms are also filled with a small pattern. The simplest examples of this is in rugs which have a design of conventional palm leaves on a figured ground, a treatment which you will also find in cashmere and camelshair shawls. In Morris' tapestries and chintzes the de-

sign is usually one of conventionalized floral forms in strong color on a light colored ground which in its turn is covered with a tiny sprig or diaper pattern. It requires but little study of either of these examples to discover how much the fabric gains both in richness and finish by the combination of pattern with pattern. But it is also essential to note that the leading pattern is always stronger and larger than the auxiliary one, also that the latter is extremely conventional, even to the point of insignificance. Moreover, the distribution of the secondary pattern is almost always uniform and it is never sufficiently pronounced to detract from the value of the pattern proper.

How apply this principle to the ordinary room and to the distribution of pattern between its various elements? Take one of the popular white bedrooms, which depends for relief upon a brightly flowered linen, chintz, or cretonne. Naturally woodwork and walls will be white, the ground of the printed fabric will be pure white, and the furniture will be white enamel. It sounds well enough on paper, but in practice the effect is apt to be a little glaring, and the surfaces lack depth of tone. To begin with, the pattern of the cretonne should be a bold one, one which asserts itself, not one of the rather fiddling design of small sprays of flowers at once so common and so ineffective. Against so much white you should use a cotton rather pictorial in effect. We must admit that any textile which is pictorial in effect sins against the canons of decorative art, but sins so agreeably that much is to be forgiven it. Personally, I think nothing looks so well in a room of this sort as a good combination of pink roses and blue ribbons. Then, instead of

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a plain surfaced white wall, which may be either paint or distemper, have a figured white paper, one with a very small, all-over pattern in two tones of white. You will find such papers among those sold for ceilings, but they are equally good for walls, far better, I think, than two-toned white-striped papers. With one of these papers, your wall is still white, but it has acquired a certain texture and depth of tone, while the pattern is so unobtrusive that it takes nothing from the effect of the figured textile which gives the room its essential character. It is always a risky business trying to match textile design in wall paper, but it is not an impossible thing to find a blue ribbon border which will harmonize with the blue ribbons of the cretonne used, and which can be carried around each of the walls, panel fashion. There are also borders made to match individual cretonnes and these look well above the figured white wall, although the designs are seldom very satisfactory.

Another very good wall for the sort of room I am treating is one of the French arrangements of bordered panels in delicate gray tones. These copy with fidelity the panelled and carved wall of the Louis Seize period, and are very delightful, when the size of a room and the disposition of its openings allows them to be used. They are expensive and their suggestion is of a rather imposing sort, which makes them unsuitable for the house of modest pretensions, but they are a charming wall finish for a formal drawing room, in which the place of the cretonne or printed linen can be taken by a flowered tapestry in delicate colors.

The Problems of the Living Room.

It is in the living room that the matter of pattern presents the most difficulty. Here, I am inclined to think, the best solution is the wall of more or less indefinite pattern in neutral color, the sort of paper which suggests a woolen damask or a dull surfaced brocade, the wall which may be a warm gray, olive, golden brown, or even blue gray. Then the furniture coverings can be plain, leather, velour, liberty velvet, or corduroy, and the element of decorative pattern supplied by the curtains, hanging to the floor in

straight folds, and made of some strongly patterned cotton or linen, either contrasting boldly with the color scheme of the room, or carrying out its general tone. An illustration of what I mean is found in a room whose walls are covered with a two-toned stripe in a low key of green, the woodwork white, with a line of green to tie it to the walls, the chairs and couches covered with green velour, darker than the walls, while the curtains are of cretonne with a black ground and a decorative pattern of rose colored flowers, green leaves and blue and green birds. The green carried out the tone of the walls and covers, the rose contrasts agreeably with it and the blue of the birds permits the introduction of touches of blue in the way of ornaments and cushions.

Or suppose a golden brown wall, one of the best possible backgrounds for pictures. The furniture may be of the sort that does not need upholstery, in brown oak, while the curtains will be of printed linen on a tan colored ground, introducing brownish foliage and blossoms of soft rose and purplish pinks, tones which can be repeated in various objects in the room, in cushions, in the covering of a single chair, in a vase, while the rug might be an Oriental one, with no very distinct pattern but with the suggestion of a purplish pink bloom, a thing which sounds fanciful, but is by no means unusual in eastern rugs. Or, with equally good effect, the curtains might be made from a petit-point tapestry, one of those charming fabrics which copy the tones and to some extent the designs of old French and Flemish tapestries. The wall pattern in this case should be a small and unobtrusive diaper, possibly a buckram or burlap paper with its slight suggestion of fabric, the furniture covered with blue or russet corduroy, in one or other tone of the tapestry, the whole scheme brightened by introducing a rich orange brown.

Any number of variants on this idea might be suggested, but I leave something to the imagination of my readers. The important points to be remembered are the subordination of one pattern to the other, the minor pattern being introduced simply as an enrichment of the other, and that any material of strong decorative effect must be used sparingly.

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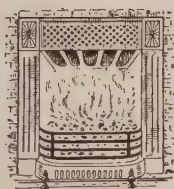
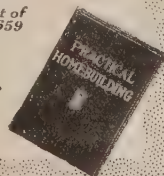
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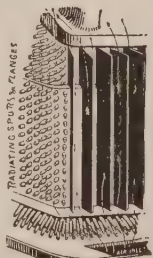
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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

EDITOR'S NOTE.—The courtesies of our Correspondence Department are extended to all readers of KEITH'S MAGAZINE. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Mahogany and Oak.

C. E. P.: I am a constant reader of your magazine and as we are building a new home we would like help in furnishing the living room, den and reception hall. The woodwork in these rooms will be quarter sawed oak, also the floor. My living room and reception hall furniture is mahogany but will get new rugs. The den furniture is light oak and the rug is mostly dark green for this room. Had thought of gray walls for living room and reception hall with green and gold stenciling, but didn't want the den to be like them. Dining room will be oak-stained early English with blue walls, rug, hangings, etc. Would also like ideas for woodwork, walls and floor of kitchen—other than white enamel.

Ans.—We have often puzzled over the conundrum of why so many people who have mahogany furniture use an oak trim in the new house and vice versa. It is impossible to bring oak woodwork into harmony with mahogany, unless a very dark English brown stain is used.

In regard to color scheme for walls, gray is not good in a northwest room and green still worse. The green rug might possibly be used in the den if you will carry out a consistent scheme of green and yellow, in treating the room. We should make the walls soft dull yellow, cream ceiling, and, if possible, get some upholstery onto the light furniture, in dull yellow material. Then have curtains of green and much yellow cretonne.

Do not carry green into the living room at all, but do it in soft creamy browns and rose. You do not say whether you expect to use merely tinted walls or a combination. It will be very difficult to get it right without paper in the hall at least, for there you need to bring the room colors together.

A quite attractive kitchen can be made by finishing the woodwork natural with varnish and painting the wall deep cream. The lower part of the wall could be painted leaf brown, with a molding between.

Textile Panels in Dining Room.

S. A. McC.—I am enclosing a rough sketch of our new home and am begging some suggestions for the interior decorations. All the woodwork down stairs will be stained oak, not too dark, and I had thought to tint the walls in all three rooms in shades of tan. A warm tan in the reception room, with a fleck of red or maroon in the rug and the same color in the short silk curtains at the high windows over the bookcase and settle. Then in the living room and dining room the gray tan walls with touch of green in the living room and old blue in the dining room. The dining room walls will have wood stiles up to the top of the windows. Would you leave those panels plastered or cover with the burlap of a darker shade of tan; what would you suggest for draperies?

Ans.—We are very much in sympathy with your ideas as outlined for treatment of your interior. By having the decorator add a little *black* to the tint, you would get your grayish tan for living room, with which green would combine admirably in the furnishings and old blue in dining room. We highly approve of a textile of some sort in dining room paneling, but you will find the color you want in a ready stained burlap. There is a putty grey heavy crepe paper, we have used a great deal, that has the effect of very rough plaster and is admirable for dados and wainscot. A line of stencil decoration in soft old blue around these panels would add greatly to the room. We would use old blue Sunfast at the windows and deep, soft blue rug. Your ideas for the window shades are excellent.

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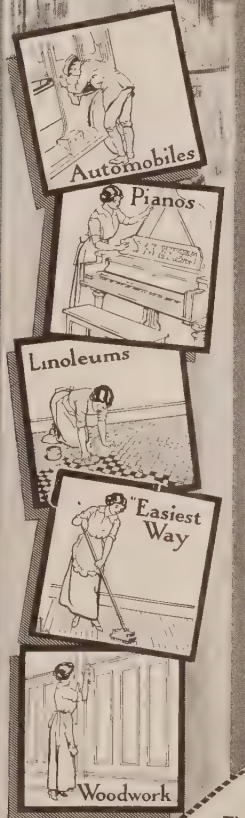
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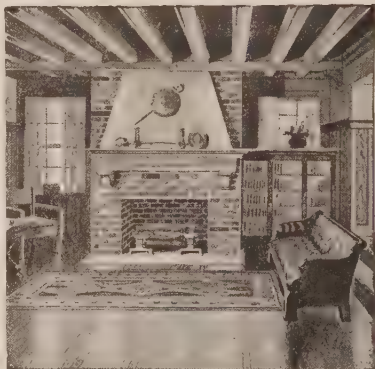
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The North Dining-room.

H. O. W.: I wish to ask your advice about dining room walls which are ceiled to a height of four feet.

The room is 13x18, having windows across entire north side of room. The woodwork is finished in natural pine and floor a good maple a little darkened by use. Our furniture is Flemish oak.

As the woodwork is somewhat marred we think of painting instead of keeping it in brown. All of the rest of woodwork in entire house is white or ivory. I would like to introduce a shade of blue into the room.

I've tried to find an answer to my question by looking over back numbers of your magazine, but did not find a case just like ours. Will you also kindly advise me how to furnish a room for my 4-year-old daughter. Her room is fourteen feet one way and nearly square. It has a west window and a north window. I am undecided whether to use white or gray furniture.

Ans.—If your dining room had a south exposure or even west, you might have old blue walls. But having only a north lighting, blue is not at all the color for it. We should paint the woodwork deep ivory, which will set off your Flemish furniture much better than the natural pine. The wood wainscot is too high for a chair rail and not high enough for plate rail, but probably that cannot be changed. There is a decorative paper which has blue and green foliage on a sort of yellow sunset ground. You might use that above the wainscot with a dull yellow ceiling. This would give you the note of blue you desire and also an effect of sunshine in the north room. In fact, the room would be transformed. You should then have a rug with blues and greens on a tan ground, and sill curtains of dull yellow Sunfast at the north windows.

The little daughter's room should have white woodwork and a paper with Dresden China little pink and blue roses, all-over pattern, on the walls. The furniture should be white enamel. Exceedingly pretty, simple designs now come in children's furniture. There should be curtains of white ruffled muslin and side ones of plain pink.

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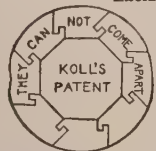
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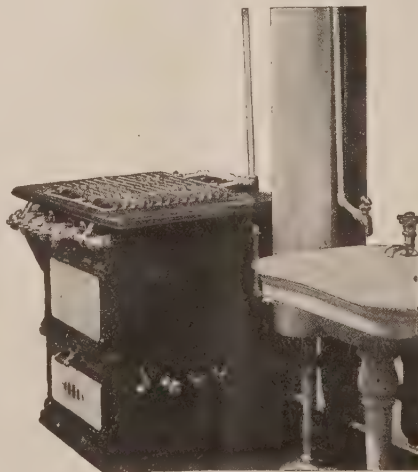
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HOUSEHOLD ECONOMICS—Continued

tank full of hot water, your laundress boils a boiler of clothes and you have ample hot water for the remainder of the washing. Each time you light a burner in the gas stove, you heat water to use.

During one of the tests with the hollow grate the water was drained from the hot water tank which it supplies and the



Top view of hollow grate.

tank was filled with cold water. The four burners of the gas stove were lighted and in five minutes the water in the tank registered at 202 degrees.

It is claimed that this hollow grate plays a joke on the gas company and heats the water without any additional expense to the house holder, over what the gas would cost for the cooking. One would expect that in heating the water in the pipes it would retard the cooking over the grate, but a clever device in the shaping of the under side of the grate seems to have overcome that difficulty. If you notice the cut showing the under side of the grate you will see the circle of the hollow grate which holds the water in heating. The rim has a bevel so placed as to throw the strength of the flame toward the center, while at the same time it protects the outer edge of the kettle and the handle from unnecessary heat. The demonstrator asks you to remove the kettle of boiling water which you have been watching, without giving you a holder to lift it with. When you refuse to attempt it, he takes hold of the long handle unconcernedly, then lays his fingers on the outer corners of the grate. This outside heat is what has gone into the water, it would seem. The volume

of water in the grate over the fire at any one time is quite small, so is quickly heated and starts a circulation. When the grates and the water are thoroughly heated, they will hold the heat for some time after the gas has been turned out.

Every one appreciates the value of plenty of hot water. It is one of the adjuncts of civilization. Any new device which helps to make it plentiful and easy to obtain is likely to be very well received. In apartment houses and large establishments there is always hot water in any quantity. Indeed that is one of the advantages of the large apartment buildings. It is in the private homes where this hollow grate will become a boon.

The owners of the smaller four and six-family apartment houses, and of the newer "duplex" types of house are installing the hollow grates on their gas ranges, as a way of competing with the larger apart-

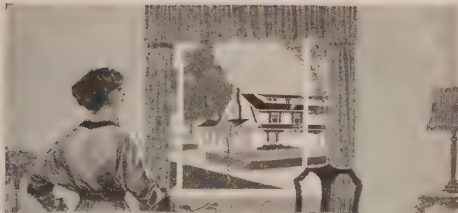


Under side of grate.

ments in the matter of a plentiful supply of hot water.

It might be noted that the hollow grate requires a hot water tank in the kitchen, or above the heating apparatus. If the large tank is in the basement, connected with the furnace or a separate hot water heater, a small twenty gallon tank can be placed over the range, and enclosed in a cupboard if one wishes to have it out of sight, as most housekeepers do.

In designing it the bars of the grate are made wide enough apart that there should be no difficulty in cleaning either the grates or the range. The grates are made to cover either two or four burners, according to the size of the range.



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neighborhood improve-
ment begins at home"**

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 HE table service in most houses leaves much to be desired, and it is least satisfactory, as a rule, in houses of certain pretention. People seem to forget that all the differ-

ent things which make up a single course should be served at the same time. It is not agreeable to watch your helping of roast lamb slowly congealing while you wait for the potatoes to be followed at a long interval by creamed turnips and stewed tomatoes, and later still by the gravy. Such slow service lengthens the meal unduly, tries the patience of everyone.

You cannot, with a single maid, expect to have the stately and elaborate service rendered in houses where they have a butler and a second man. Accept the fact and have the vegetables helped by some member of the family, the dishes containing them being left on the table during that course. Except in the case of very fluid vege-



The birthday cake.

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TABLE CHAT—Continued

tables have them served on the same plate as the meat. It is seldom practicable to cook tomatoes so that they do not need a separate plate, but all the creamed vegetables are much better if merely well covered with the sauce instead of floating in it.

Unless the head of a family is a very expert carver, it is desirable to have large cuts boned. A rib roast is not improved by the process but it makes not the slightest difference with lamb, veal or pork. Poultry is always troublesome, but it is very easy to cut under the joints in the kitchen without affecting the looks of the bird.

At breakfast and luncheon it is perfectly correct to dispense altogether with the services of a maid, except when a fresh supply of warm bread or the like must be brought from the kitchen. The electric toaster, the chafing dish and the coffee percolator have done a great deal to simplify the service of these meals.

The Birthday Cake and Candles.

Birthdays have a fashion of coming in the cooler months, which seem best adapted to festivities, and the cake is a very important feature of the supper table. It ought not to be a rich cake, though it often is. For little children, an angel cake, not of the cotton wool variety, but soft and spongy, is very good. Give it a thick pink icing, sprinkled with candied rose leaves and let the candles be white.

For older children, make a simple cup cake rule, omitting half a cupful of the flour and stirring in enough cocoa to make it quite dark. Put in plenty of raisins and currants and a few nut meats, and you will find it quite as acceptable as a regular fruit cake.

For decorating the table, the glass candlesticks sold at the 10-cent stores are very effective with either white or colored candles. Candle shades are just as well omitted from a children's party. They always wobble and are likely to cause grief. Our illustration shows a pretty arrangement of them with a decoration of leaves.

Some Fancy Cakes.

Always supply small cakes in addition to the large birthday cake. They make the table look pretty and give a great

deal of pleasure. Given a cup cake rule, baked in a large sheet, you can have a considerable variety with little trouble. Bake the cake in a large dripping pan so that it will be about half an inch thick. Cut part of it into circles. Put two together with a layer of icing and chopped nuts, then cut them in two and ice each all over, using pink, yellow and chocolate icing. Cut some in squares, ice with white icing and press into the center a walnut meat or a candied cherry. The cats' faces shown in our second illustration can be cut out with scissors. After the chocolate icing is dry the features can be put in with white with an icing syringe. Other shapes covered with white icing can be decorated with candied rose or violet petals, or dusted with macaroon crumbs, or with crushed peanuts. Any book on French cooking will give any number of these little cakes, which they call *petits fours*.



Cakes for the party.

Decorating the Table.

You can set the table for the party effectively by using a center and doilies of crepe paper. There is a considerable variety in these sets, but paper napkins are hardly to be recommended, unless each child is supplied with more than one.

If you want to give each child some souvenir, choose a growing plant. The table looks very pretty with a little fern at each place, a strip of the cretonne folded around the pot, but larger plants must be distributed at the end of the festivities.

A child's party ought to be just as pretty as it can be made, and children are generally very appreciative, but do not let it be elaborate. The money standard may be unavoidable later on but it is a great pity to make children acquainted with it.

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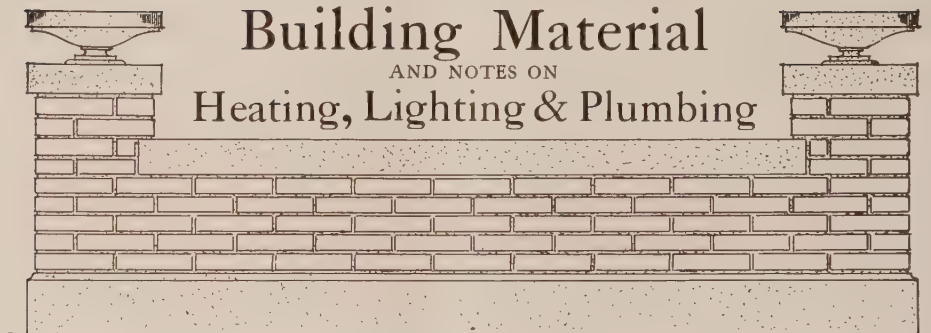
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What Do We Know About a Heating Plant?

EVERY householder knows something about putting fuel into a furnace, but as to how much heat he gets out of it, how much is lost before reaching his apartments, and why, and how, he may know absolutely nothing. When a man is selecting a furnace, he talks to his neighbors and friends. Jones has a furnace which he says is fine. He has only used "so" much coal and the house is always warm. Jones may understand stoking a furnace properly. He may have employed the best contractor who figured, instead of the cheapest, to build his house; and he may be a careful man who looks well after his fire at night. Brown, on the other hand, may be always grumbling about his furnace, especially as he goes down town in the morning. Jones' type of a furnace is likely to be selected; but Mr. Householder may be the Brown type of a man.

There are certain fundamental elements around which the heating problems gather. The heating engineer has been thoughtful of Mr. Householder and has put on the market treatises taking up the especial points of the different heating apparatus, for those who really wish to know, technically, how it is done. To many people, the real connection between the putting of fuel into a fire box in the basement and the comfortable warmth of the living apartments is a veritable mystery, a usual but no less a real mystery.

The loss of heat in transmission from the furnace to the living apartments is one of the important considerations.

The first cause of this loss of heat lies in the difference of temperature between

the outside atmosphere and the inside. The ease with which this loss occurs depends on structure and texture of the wall, whether the cellar and attic are cold, whether the window construction is tight, the amount of glass surface exposed to the weather, et cetera. Many of these are things which count in the first cost of the house, and in which a cheap or light construction may have been adopted as a matter of economy. An economy which takes an increasing toll in the fuel bill year after year is questionable as a matter of economy to the householder, whatever it may be to the investor who expects to rent the property.

When installing a plant, the live heating man will make a point of carrying his pipes as directly as possible. Heating pipes which wander around the house before reaching the outlet into the room to be heated, no matter how well wrapped, must be wasteful of heat in transmission. Especially is this true with hot air heat. With any kind of heat, but especially with hot air, the registers or radiators should be placed in the first planning of the rooms so that the risers shall be as direct as possible. Hot air pipes should go from some place very near the furnace directly to the rooms to be heated, and the furnace so placed to accommodate them as far as possible without elbows or turns in the vertical pipes. Common sense is often applicable even to the most technical subject, and this is certainly the case with the heating plant.

When the house is well built, and the heating pipes may be direct and well placed, then a heating plant will have a fair chance to do its best work. Of the many types of heating plants, each one



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FIREPLACE EXPERT

has its own theory for producing a complete combustion. It is not the fuel which goes into the fire box that produces the heat; it is the fuel that is burned under desired results. Such an arrangement of drafts and grates and fire box as to insure a complete combustion of the fuel is the aim of every furnace. The individual owner may make his selection because he believes one especial type is correct in principle, or he may depend entirely on results and accept the testimony of those who have tried out the different types. Be that as it may, when Mr. Householder has a perfectly good heating apparatus installed, he still has one of the most important things yet before him, and that is its proper treatment and attention.

The campaign for the abatement of the smoke nuisance has had some rather important bearings on economy in the use of fuel. Investigation showed that the great columns of black smoke pouring from the chimneys resulted from an imperfect combustion of the fuel and was a waste to the owners, caused either by the carelessness or lack of knowledge in the stoking of the furnaces. Classes were established teaching the proper stoking and care of furnaces, and some statistics were published as to the relative economy of fuel consumption with and without the black smoke. All of these things are not without interest to the householder.

The quality of the air which we breathe indoors is a subject now under consideration by experts. There is very little relative humidity in the indoor air. A lower temperature will give greater comfort if there is a sufficient amount of moisture in the air of a room. Many people are not comfortable unless the thermometer stands at seventy degrees or above. We are told that the reason for this is the extreme dryness of the air; that with a proper relative humidity sixty-eight degrees would give a more satisfying sense of warmth and comfort than the higher temperatures.

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One of the most unique organizations of its kind is the recently-organized Building Data League, Inc., an outgrowth of the Architects' Bureau of Technical

Service. Its membership is made up of consumers, organized to secure through co-operation exact and reliable information as to the quality and relative economic values of the vast number of materials and devices used in the construction and equipment of buildings. The league's purpose is to establish market standards in the building industry, so that the consumer may readily secure accurate information and a working knowledge of available materials, methods and devices. On the other hand, the league will direct the attention of the producer to the demands of the consuming class with a view of securing high standards and methods in the manufacturing and marketing of products.

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To Remove Cement Wash.

J. H. R.: I have read your magazine for some time and having found much valuable information in it, am now writing for some information which I think will not only interest myself but many of your other readers as well.

My house is built of concrete which has been treated to a cement wash. This wash has peeled off in spots and I desire to treat the surface with a cement coating. To do this properly I want to remove the cement wash now on the walls and my query is: How am I going to do it?

Is there any liquid which will remove it without injuring the concrete surface? I have been informed that sand blasting is the best method but my house is located in a section in which it is impossible to remove the cement wash by this method.

Ans.—In regard to the removal of the remaining cement wash on the walls, we would say that in our opinion the sand-blast would be the most economical and thorough method. We think that the second best method would be to allow the building to stand until that portion of the cement wash remaining had become pretty well weathered, and at this stage it might be feasible to remove it far less readily by using a stiff steel brush. We are sure that any plan of using a solvent or chemical for the purpose of removing the material would be unsatisfactory for various reasons, and it is doubtful as to whether there is any such chemical which might be safely used, and, furthermore, it is logical that after having used any such chemical, providing there was one, that it would be necessary to wash the building in order to remove and neutralize the chemical.

Taking it all and all it will be seen that any operation of this kind would be very expensive, and very doubtful considering it from the standpoint and utility of effectiveness.

Dampproofing Cellar Walls.

H. R. B.—We are contemplating building a two-story brick house with basement. The ground on which we will build is high but level and is wet during the wet season. Could you tell us what to do to prevent dampness in the basement? We shall lay a cement floor.

Ans.—There are several ways in which this may be accomplished, of which the most satisfactory would be to make the concrete wall sufficiently rich in cement that it will be waterproof. Under general conditions the proportions of 1 part of a good brand Portland cement to 3 parts sharp, clean sand and 5 parts of broken stone or gravel, will make a waterproof wall. Lay ordinary drain tile outside the wall below the basement floor level to carry off water.

Under conditions where water stands on the ground it is recommended that after the concrete floor has been laid, it be mopped with hot tar with especial attention given to the joint between the floor and the walls, where the water is likely to enter. Lay burlap over the tar, which has been carried up the side wall for a foot or more, and then again mop over the burlap with hot tar. The outside of the foundation wall may also be mopped with hot tar if desired.

Another way of meeting the problem is to waterproof the concrete walls. This may be accomplished either by the "integral process" by which a number of good brands of waterproofing materials are on the market.

PROPERLY HUNG STORM WINDOWS

Are an aid to your comfort during the coming cold winter days. The old button method of putting up and taking down storm windows has always been a bugbear. Is unsafe—causes endless trouble and makes it impossible to properly ventilate the home.

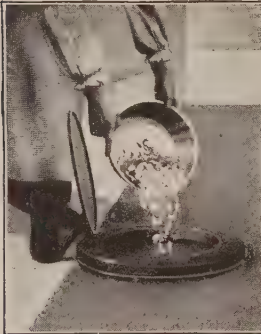


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WOODS

AND

HOW TO USE THEM



EDITOR'S NOTE.—When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH'S staff of wood experts.

This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

The Timber Supply.

ACCORDING to the best authorities, our potential forest area is large enough to supply all the timber of every kind that we need if it is rightly handled. Here is a field which for years to come will afford great opportunity for the activities of both statesmen and foresters. It is believed that our American forest area of 550 million acres contains 200 million acres of practically mature timber; 250 million acres partially cut and burned over, on which there is sufficient natural reproduction to insure a fair second growth; and finally, 100 million acres so severely cut and burned that, unless supplemented by planting, there will be no succeeding forest of commercial value.

Although four-fifths of the present timber supply is privately owned, it is highly probable that a hundred years hence the bulk of the timber then existing will be in public forests. Because of the long time investment required, the hazard involved, and the relatively low rate of interest obtained from forestry, private capital is not likely to engage in timber growing on a very large scale.

The national forests aggregate about 160,000,000 acres, and are chiefly in the Rocky mountains and along the Pacific coast. They were created by the withdrawal of public land from private entry and sale. Within the last few years, however, the national government has entered upon the policy of purchasing timber lands in the eastern mountains, where for-

est growth is considered necessary for the protection of watersheds at the heads of navigable streams. Extensive purchases of forest land, most of which have been cut over, are being made in the White and Appalachian mountains.

Probably 75 per cent of the merchantable standing timber in this country is under private ownership at this time. Private capital always seeks the best investment, and these private holdings contain the best standing timber in the country.

Timber Resources of Russian Empire.

One of the lumber journals states that 39 per cent of the Russian empire is estimated to be under forests, which in European Russia cover an area of 474 million acres. Finland, Poland and the Caucasus bring the total to more than 549,000,000 acres, exclusive of Siberia. In the Ural provinces, forests cover 70 per cent of the area, in the northern provinces 68 per cent, and in the four lake provinces, 57 per cent. It is estimated that in Western Siberia alone there are 465,000,000 acres of virgin forest, and Eastern Siberia, while not so richly endowed, has sufficient timber to supply the world's demand for years to come.

Tests for Wood Preservatives.

The Forest Service Laboratory at Madison, Wisconsin, has just completed a series of preliminary tests of wood preservatives, the results of which have been published in a Department (of Agriculture) Bulletin, No. 145.



House of Daniel W. Nye, Esq., Kew Gardens, Long Island, N. Y. Aymer Embury II, Architect, New York, N. Y.

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When it was announced that these tests would be conducted, by-products of all kinds were sent to the laboratory for testing—the condensed fumes of smelters, the waste liquors of pulp plants, the refuse of tanneries, the skimmed milk of creameries, and a miscellaneous assortment of compounds. The desire was to find how many of these various compounds and chemicals were really valuable as wood preservatives. Only those which showed some promise were admitted to test.

The tests aimed to bring out the important physical and chemical properties of the preservative, its effect on the strength of the wood, its permanency, its ability to penetrate, the combustibility of the treated wood, the effect of the preservative on paint, and so forth. It was found that the preserving oils had no appreciable weakening effect upon the wood, although water-soluble preservatives did cause some slight weakening. The creosote and oil preservatives were satisfactorily penetrative, while wood-tar was very difficult to force into the wood. Viscous or sticky oils did not penetrate the wood readily unless both wood and preservatives were well heated during the process. Woods treated with oils ignited at lower temperature than those treated with water-soluble salts. Oil treatment rendered the wood unfit for subsequent painting, but water-soluble salts caused no discoloration of the painted surface.

Sweeping conclusions cannot be drawn as yet from the data brought out by these first tests; yet they will serve as a foundation for a study of the most efficient use of wood preservatives.—*Mississippi Valley Lumberman*.

To Protect Wood From the White Ant.

An effort has been made to determine the value, as a protection against the native white ant, of various methods of treatment as applied to different kinds of wood. Dr. A. D. Hopkins has conducted the experiments and submitted a report. A note sent out by the Department of Agriculture at Washington states that in conditions where alternating check stakes were attacked by white ants, after being subject to attack for from 5 to 12 months, yellow pine stakes charred by burning for about five minutes were attacked at the end of one year. This

treatment it seems only delays attack. Yellow pine stakes impregnated by the "open tank" method, with coal tar and wood creosotes; dipping and brush treatments with wood and coal tar creosotes; and stakes treated by two closed cylinder pressure processes with several different creosote compounds were not attacked at the end of one year. Untreated alternating check stakes were attacked by white ants.

An examination of test blocks showed that after being buried in the ground with infested logs for nearly six months, some of the blocks impregnated with paraffine wax were attacked by white ants while wood treated with chlorinated naphthalene was not attacked. Untreated teak, greenheart and peroba test blocks—all tropical woods—were not attacked, while untreated white and red oak, sugar maple, birch, and red gum were attacked and more or less seriously damaged.

The Use of Sycamore.

W. S. M.: Please tell us all about sycamore. Can it be used as a finish for inside work? How would you stain it? Will it take a mahogany stain? Is the wood of any value for structural purposes?

Ans.—Sycamore is a wood that is used to a very limited extent in structural work. The box interests employ it largely in the manufacture of cases for chewing tobacco.

The wood has an involved grain and shows a tendency to split and warp in wide stock or long lengths.

The chief beauty is the original color flecked beautifully by the intersections of the medullary rays in all quarter-sawed stock. It is hard and durable. The supply is limited and of the total product, about 30,000,000 feet in 1913, probably 70 per cent was used for boxes and crating.

In the hardwood districts sycamore is used for framing and sheathing with other hardwoods, but in a commercial sense it is not so employed.

If used for interior trim it should be finished natural with white varnish so the beauty of its color and figure will be fully developed.



The brush

leaves a trail of beauty behind it when the woodwork is properly treated with the right varnish. The right selection of varnish is vital, however, and should receive careful consideration.

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The Honeywell Tank-in-Basement method costs practically the same as the ordinary system. It saves running the expansion line to attic and bringing back the overflow pipe, which offsets the increased cost of equipment.

Unit Sash Balances, for use in concrete buildings, which have been put on the market by the Pullman Manufacturing Company, of Rochester, N. Y., makes it possible to do away with the usual box frames for windows, gives a simpler construction, and eliminates another use for wood in fire-proof construction.

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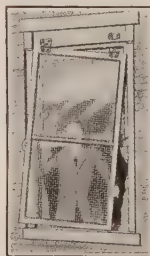
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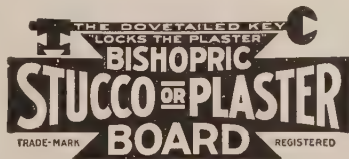
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(Continued on Page 293.)



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Photo by Mary H. Northend, Salem, Mass.

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*Residence of D. T. Dickson,
Francis T. Gugert, Architect,
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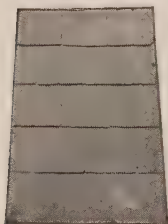
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Where to Obtain Building Material and New Home Equipment

(Continued from Page 290)

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Chicago Millwork Supply Co., 1421 W. 37th St., Chicago, Ill.
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Harris Bros. Co., Dept. Y-64, Chicago, Ill.
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Sherwin-Williams Co., 629 Canal Road N. W., Cleveland, Ohio.

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Cabot, Samuel, Inc., Boston, Mass.
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Kees, F. D., Mfg. Co., Box 102, Beatrice, Neb.
Phenix Mfg. Co., 048 Center St., Milwaukee, Wis.
Watrouse-Acme Mfg. Co., 520 S. W. 9th St., Des Moines, Iowa.

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KEITH'S MAGAZINE

ON HOME-BUILDING

M. L. KEITH, Editor and Prop.

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Just a Word

Home Building and Trained Labor



PEOPLE who build homes by employing day labor, know how difficult it is to get efficient workmen. For that matter, the same difficulty might be said to exist in every line of work. Even when a long line of men or women apply for the job, the selection must be very carefully made and even then it may be necessary to repeat the process. This is the day of efficiency in business, but it is also a time when it is almost impossible for the workmen to obtain a careful training. The custom of requiring an apprenticeship has been dropped. It was a hard school to the youthful apprentice, probably unnecessarily hard, but it was the business of the master workman to train his apprentices, not only that he might have the necessary assistance, but also with a feeling of obligation toward the younger men in his employ.

This is the day of specialization. A boy enters a shop wishing to learn the business. What opportunities does he find? He comes in contact with only one small department of the work. He learns to do certain things but without any co-ordination with the other parts of the work. There may be someone who answers his questions, provided he asks them, but there is no one whose business or interest it is to see that he has an opportunity to learn anything more than the one operation on which he is engaged. Certain classes of business which require skilled craftsmen, depend on workers trained in the old country, because there is not adequate training to be had in this country, or that it is not accessible to any but the most ambitious youth.

The industrial schools of Germany have trained many of the workers in America and after these excellent schools some of our American schools of industrial training are modeled. Big business is co-operating with these schools, both by allowing their skilled employes to act as teachers for certain hours of the day or week, and also by making arrangements by which their untrained employes shall spend a certain amount of time in the schools. The Captain of Industry, who has himself felt this need, has in one instance made a bequest which is establishing an Industrial Institute, now meeting and responding to the needs of the youthful worker, and also of the workman who is only partially trained. When the contractor has no difficulty in getting thoroughly trained workmen, the home builder will perhaps be the one to benefit most.

No industry is so interwoven with good craftsmanship as that of the builder. No other will be influenced more directly by the work of the industrial schools.

KEITH'S MAGAZINE

ON HOME BUILDING

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The visitor may stop to rest and enjoy the view.



The ranch house.

The Ranch House

Model Farm Bungalow Shown at the Panama-California
Exposition at San Diego

PEOPLE used to build "Castles in Spain" in their leisure hours, now they plan a "Model Bungalow" in their spare moments, fitting the location to some lots already bought or in contemplation, or else they plan it "just for the fun of it." A simple home-like house attracts attention even at a great exposition such as those at San Francisco and San Diego, which people from all over the country and from many parts of the world have been visiting for nearly a year. Set at one side of the great courts, beautiful buildings and wonderful vistas, an unobtrusive though very attractive little bungalow catches the eye of the visitor, who finds there quite a different exhibit, though hardly less interesting than those displayed in the great buildings of the exposition.

The Model Intensive Farm, a ranch of

thirteen acres prepared and built by the seven counties of Southern California as part of their exhibit at the Panama-California Exposition at San Diego, is a marvel to the eastern visitor, with its acre of grape fruit, two or three acres of oranges, an acre of lemons, and a five-acre tract set in trees bearing all the kinds of fruit and nuts one can think of, from English walnuts and apples to figs and all kinds of berries. The budding of various fruits is also demonstrated. Trees budded to as many as thirteen kinds of citrus fruits are already in bearing, showing lemons, oranges, limes and grapefruit and many other varieties growing on the same trees. On another plot fifteen varieties of grapes are compared. On still another plot the new European crop, ramie, the fibre of which makes fine linen, is being tested. Since the out-



The patio is one of the most attractive parts of the house.

break of the war, which stopped the importation of the European product, New York manufacturers have offered alluring inducements to get California farmers to grow ramie.

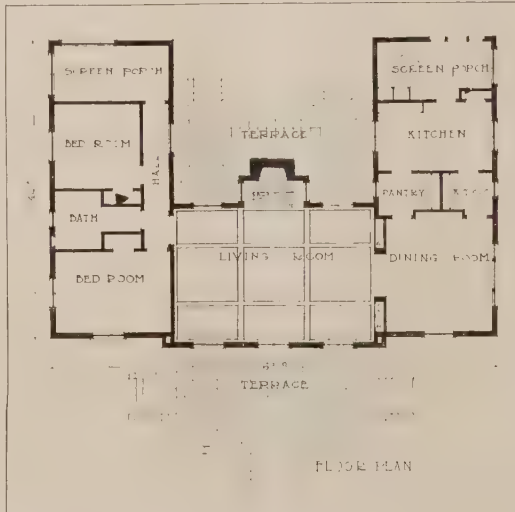
We are all familiar with the "exhibits" of the fruit, vegetables and other products of the land as they are shown, carefully piled in show cases, or pickled in great glass jars. The seven counties of Southern California decided to have a "growing exhibit" and this is the form it has taken, the fruit blossoming and ripening on the trees, during the

year of the exposition, flowers and vegetables in their season.

Two years ago, not only this farm, but the whole exposition park was little more than a desert, sand and sage brush. Now it is a garden fit for the gods, and banked by jungle

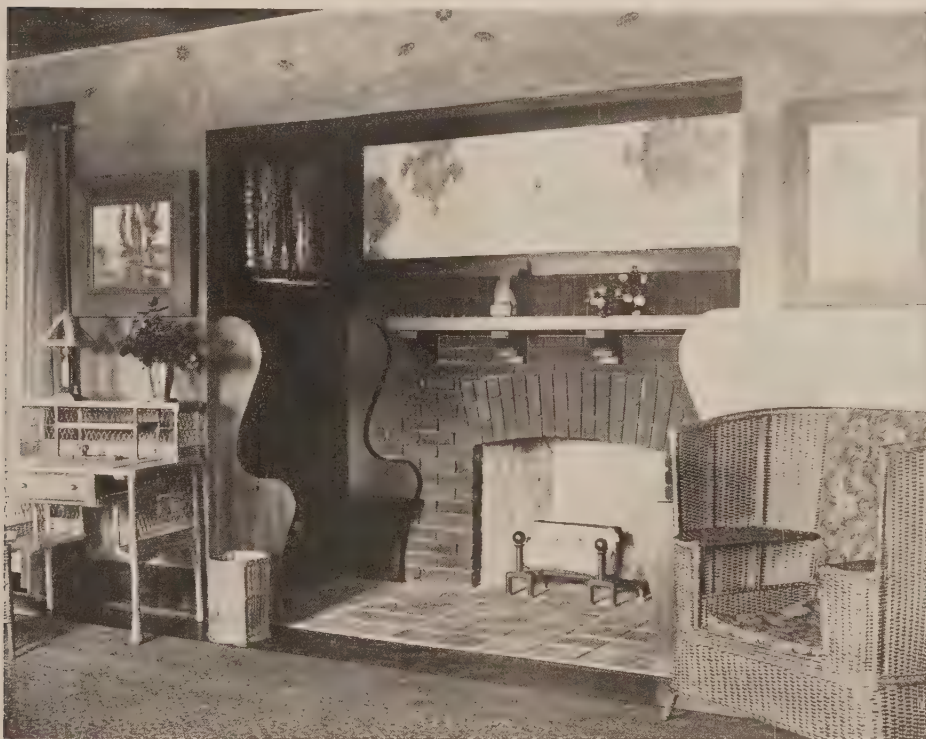
in which may be found almost every growth of that semi-tropical clime.

The farm is interesting, but it is to the ranch house that we turn our attention. It was built as an ideal farm house, such as the people of Southern California are building, but it would seem to be quite as good a home for a banker or a doctor, for



it is simply the farmer's home. The house for the superintendent of the farm is on the other side of the garden. The house itself is low with spreading wings which form a patio at what might be called the rear of the house. This is another example of the fact that the old-fashioned "back of the house," as a place of refuge for all the unsightly

and the living room, as do the more northern climes, and the three openings from the living room to the terrace are filled with French doors. The seats on the terrace are inviting and many visitors stopped before entering to rest and enjoy the view. The living room is the key to the arrangement of the house, as will be seen by the plan.



The ingle and fireplace claim the attention.

things not wanted elsewhere, has fortunately passed away. The patio and the kitchen porch are, if anything, more attractive than other parts of the house.

The house is stuccoed, with timber work in the gables. There is no porch at the entrance, but instead a tiled terrace, two or three steps above the lawn, with seats on each side of the center entrance. The mild California climate does not require a vestibule and two doors between the outside

It opens to the terrace of the patio by French doors beside the ingle-nook.

Once inside the living room, the ingle-nook and fireplace claim the attention. The fireplace is recessed with high windows over the seats. The fireplace itself is built of brick and perfectly simple, with a bracketed shelf and with a good mural decoration over it. This treatment for a chimney breast is especially noteworthy, for it is a problem which generally confronts the

home-builder. This is not a picture which has been brought from somewhere and hung up over the mantel. It becomes a part of the mantel and could not be removed without spoiling the whole scheme of the fireplace. This emphasizes the difference, not always plain, between a picture, which, in and of itself, is a thing of beauty, and a wall decoration which may be only a spot of color or design needed to beautify a



One catches a glimpse of the buffet.

with their chinz cushions. The dining room is separated from the living room by book cases on the living room side. The dining room has a simple built-in buffet, with both a pantry and a kitchen closet, connecting with the kitchen beyond. The kitchen has a hood over the range built as a hood should be, a vertical wall from the ceiling down to the height of the door, generally seven feet. This does not allow any place



The back door is sightly.

certain place, and perhaps with little value elsewhere. It is a picture in this case as well as a decoration, and is very satisfying. The furnishings of the living room are entirely in rattan or wicker, and make it very livable. Many of the pieces are quite unusual in shape, and very pretty



The living room is furnished entirely in wicker.

for dust to gather over the range except inside the hood, which should be lined with some substance which can be easily washed, preferably of tile or vitrolite, or of tin painted and enameled white. In the photograph of the kitchen, only the lower edge of the hood can be seen over

the range. The kitchen and pantries are well fitted with cupboards and there is a "cooler" built on an inside wall. On the screened porch are the set tubs for the laundry, with a hinged cover, which converts the tubs into a table when they are not being used for laundry work.

Between the kitchen and bedroom wings is the terrace with floor of mission tiles and a cement border. The outside boulder chimney and the recess for the fireplace extend into this patio, which is several steps above the ground and banked with flowering shrubs and vines.

On the other side of the living room is the bedroom wing of the house. The door from the living room opens into a small hall, and from this hall open the two bedrooms, the bathroom and the screened sleeping porch. This arrangement makes the bedroom suite independent of the rest of the house.

The woodwork of the living and dining rooms is of California redwood finished in

its natural color. The rest of the house, the kitchen and the bedrooms are finished in pine and painted in white enamel. The bathroom has a tile floor and wainscot. The bungalow was built at an approximate cost of \$4,000.

The combination garage and stable is so arranged as to house the motor car, horse, a light wagon, feed, and all the various tools that would be required on a place of this size.

The partial plan of the farm grounds here given shows the arrangement of the farm buildings, gardens and

planting of fruits and their relation to the ranch house and the superintendent's house, and the key gives the exact location of the buildings and the planting of the different plots of ground. It is not expected that every farmer would want so large a variety, nor that he would lay out his farm in just this way. The larger building at 5 is the ranch house, 6 is the garage, 4 the superintendent's or the gardener's cottage, 29 is the incubator house, 30 the brooders, 2 and



You can see the under side of the hood over the range.



On the other side of the drive is the house for the superintendent.



The incubator house is attractive.

3 the poultry yards. Vines and trellises play an important part in the entire scheme.

The incubator house is attractive as well as useful, and with a dozen out-door brooders it shows the visitor something about hatching and the day-old chick



Rose pergolas screen the poultry yard.

The poultry pens are well stocked, and they offer a number of valuable suggestions on sanitation and feeding. A green-alfalfa pen for the turkeys is protected by a wire covering six inches from the ground, on which the birds walk to gather their feed.

Back of the vegetable garden are flower beds. Wire vine covers the netting at the end of the poultry yards. There is a honey-suckle hedge. Rose pergolas form a screen the whole length of the poultry yards, at 34 on the plan. Flowers and shrubs are massed all about the houses. Narrow beds of cream and red lantana outline the road that divides the farm, the driveways and curbs.

A row of double marguerites borders the walk in front of the bungalow. California poppies also are plentiful, while gay poinsettias lift their heads out of the green masses round the house. Window boxes on the house, stable and incubator house

contain ivy geraniums and weeping lotus.

A rose covered fence, which encloses the fence on three sides, was gorgeous with several varieties of roses, chiefly Cecil Brunner. "You could have picked hay racks full of roses off that fence in their season and hardly miss them," said the superintendent. The visitor marveled at the variety and luxuriance of the flowers, perhaps quite as much as the fruits.

The "planting plan," that much-abused term, is of more than usual interest because in a way its dominating ideas may be applied by any householder who owns a lot deep enough to have room for a few trees

and a berry patch. Here are planted one row or more of each fruit, where the householder would have one tree or plant. With a little care in the selection of varieties, he may have the luxuries for his

ment to the farmers of the state and of other states, but also as an invitation to the eastern farmer. The farm country of the southwest is scarcely touched. There are millions of idle acres as rich as those already



Partial plan of the grounds showing planting.

table, and yet be independent of the markets. Since the "ever bearing" strawberries and raspberries have proven successful, he may have berries from early spring until frost.

This model farm was built not only to suggest ideas in cropping and farm better-

farmed. The Panama canal is expected to open new markets and bring a large increase of trade. San Diego is the first port of call on the Pacific side, Los Angeles is the second. They celebrate the opening of the canal as it brings the commerce of the world to their doors.

Stucco and Shingles

Margaret Craig

A House Near the Foothills



SMALL, but important cement bridge, leading across the arroyo into a new section of the outlying country district of Pasadena has made it possible for the city to begin spreading in another direction. Until a short time ago, the land of rolling wilds was traversed by only a few roads and scarcely inhabited, save by the mountain lion and the forest rangers.

Now new homes are commencing to spring up in every direction, and as if to welcome the newcomers the freshly completed residence of a well-known banker of Pasadena stands near the western extremity of this bridge that curves in a sweeping line over the old river bed. The house is

constructed in the style of an English country home, and as a result of the skill of the architects, Marston and Van Pelt, it is most admirably related to the field and foot-hill landscape, that forms the charming setting.

The lines of the house are irregular, and yet well balanced. Three entrance paths converge, giving a definite accent to the front entrance.

The long, straight walk that leads to the front door is made rather formal, but most effective, by the lines of rose trees bordering either side. This appearance is accentuated by the brick and plaster posts at the entrance topped by bay trees, which also are repeated on either side of the steps that lead to the front door.



The lines of the house are irregular yet balanced.

This doorway is most attractive. The door itself is marked by a pointed hood, and has a brick platform. The three-quarter partition between the pillars that support the hood, forms a sort of vestibule. The effect is unusual and satisfactory with the combination of brown stained timbers and plaster.

The lines of the hood are repeated in those of the roof, which form overhangs

The broad terrace in front of the house, the series of steps that lead from this to the lower lawn, and the borders of the extending porches are edged with brick, which adds the cheerful note of red to the color scheme. The windows are well grouped, and with the touch of color in the awnings, form a decorative feature.

Garden accessories in the form of benches, fountains and a sun dial contrib-



The porches give a beautiful outlook.

at either end, covering the out-of-door porches.

This is all the more interesting as one part of the house swings off at an angle, the intersection being marked by the broad white chimney which forms an important detail.

The porches, formed by these overhangs, are most advantageously placed both in regard to the outlook upon the miles of surrounding scenery, and in relation to the rest of the house, and the pillars that support them add a substantial note.

ute a most noteworthy touch of serenity to the grounds. The French formal garden, continuing the lines of the west wing, deserves especial attention. It has lovely color, planted in different shades of white, blue and red. Its chief charm lies in the garden seat at the end, made of white cement bordered with red brick. The touch of color resulting from the insertion of several blue Batchelder tiles and tiny blue wreaths is very pleasing.

Yellow French marigold banks the front of the house, and a glorious bed of gold,

brown and purple zenias is arrayed near the north open piazza. A fernery, set off by field rocks enriches the shady north exposure.

A Bungalow.

An interesting house that Miss Grace Packard has recently completed in Pasadena, is an exam-

ple of a home that is at once practical and pleasing, and is built in a style that is becoming increasingly popular.

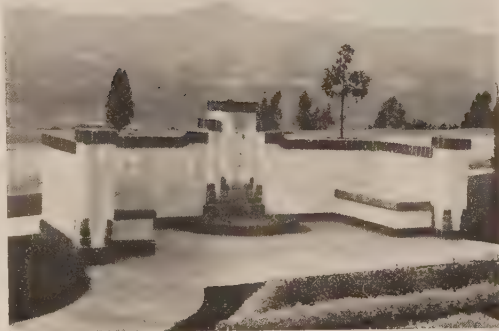
The exterior wall covering is of nut brown shingles, which harmonize well with the mountain background. Pergola porches at the front and rear add notes of character. The window spacing is well managed. There is an absence of contrast between the trim and timber work and the body of the house which is very restful.

The owner had several important consid-

erations that governed her plans. The first requirements were that the house should not cost more than four thousand dollars, and yet be fully equipped with every convenience, and also, that it should be substantially constructed. She par-

ticularly desired a living room with a lofty ceiling, and a broad fire-place combined with a picturesque stairway, similar to those built in so many of the ateliers of Paris.

The owner discovered on submitting the preliminary plans to the contractor that a rectangular house was far less expensive than one that had interesting wings, breaks in roof lines, and gables. Before starting to build, the contractor made up a list of the various items needed for the interior finishing with his estimates for the cost of



The garden seat closes the vista.



The walls are nut brown shingles.

each item. In this list were wall paper, at a definite amount, lighting fixtures, etc. It was found that by watching for opportunities to buy, where the best materials could be obtained at reduced prices, a considerable part of this amount was saved, to be used in extra details.

Rolling couches in downstairs bedrooms, bookshelves, cupboards, and long covered seats for storing all manner of things, were built in the various rooms. The owner was well aware that all of these additions would save labor in house-keeping as well as contribute to the advantages of convenience and picturesqueness.

The house is planned with two separate front entrances, so that two families could live in the house if the owner should ever wish to sell or to rent. The first entrance opens into a small reception room. The walls here are grey, and the drapery and upholstery in tones of green. The rolling couch can be made to entirely disappear under the floor of a large closet, —a good idea by which space is saved and convenience added. The other entrance door leads into the spacious living-room at the right of the porch.

The living-room is forty by sixteen feet, with a ceiling height of sixteen feet, and is quite the dominating feature of the house. It is a room that is airy, not difficult to heat, and well lighted, principally by three high windows with north exposure.

The golden brown pine wainscoting extends up about five feet, where it meets the picture rail. Above this is an expanse of tan burlapped wall, which ends in the upper white wall and ceiling. Oriental rugs, in restrained tones of reds and blues are on the hardwood floor and blend well with the mahogany furniture and blue brick of the ample fireplace.

The stairway, with its simple strong lines, forms a very decorative feature. It starts at one side of the west end of the room and ends in the picturesque balcony that crosses the chimney at right angles. The Bokhara rug, thrown across the balustrade unites the fireplace and balcony with its color and its vertical lines.

In the cool evenings, when the fire is all aglow, the room suggests an old English baronial hall, with its wainscoting, its high, raf-

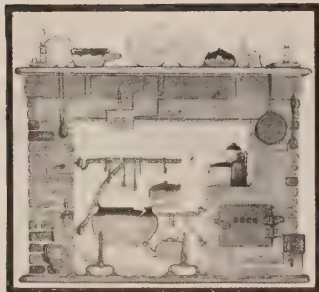


The living room has a loft ceiling.

tered ceiling, and its ample space.

The little breakfast room, just off the kitchen, is very attractive. It has white wainscoting, four feet high, topped with a plate rail. Above this is a border of the white paper designed in Chinese baskets holding red and blue flowers. Two small china cupboards are built in the wall. French doors lead to the pergola terrace. A blue and white circular rug beneath the round table adds a pretty note.

The bungalow has proved to be a most livable home and adds another proof that a small home can comprise all the elements that make for contentment.



THE KITCHEN

A Woman's Workshop

PART II.

Edith M. Jones



THE watchword of the business world today is efficiency. Offices, factories, workshops of all kinds are establishing the "efficiency plan." This standardized effort aims to secure the greatest amount of work with the least possible waste of time, energy and material. The most vital workshop throughout time has been the kitchen. Every individual depends more or less upon some kind of a kitchen every day of his life. In spite of this I think I can safely say the last industrial center to reflect efficient organization is the kitchen in the majority of the houses of the present day.

The kitchen of the present day, however, is undoubtedly undergoing great changes. We hear on every hand much talk about the "model kitchen." To most of us this is very misleading. One never speaks of a model living room or a model bedroom. Upon

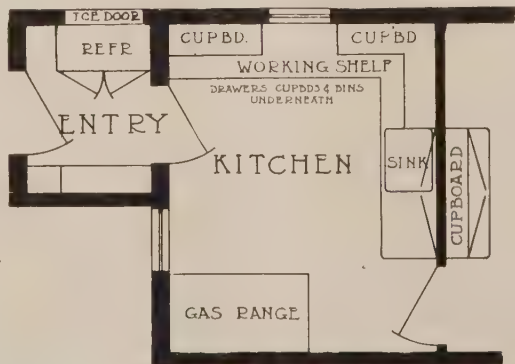
reflection one can readily see why a "model kitchen" is as impossible.

For instance, to illustrate with an example quite apart from the subject in hand—let us think for a moment how it would be if one were ordering a gown. The modiste might show several models, any one of which might need to be remodeled to meet the individual need—a change of measurement, of coloring, possibly some part of the trimming left off to lessen expense or a touch of something added to make it more beautiful.

What is true in this example is true in planning almost anything. This is true in planning a house and especially true in the kitchen. No two kitchens can be

alike because the needs of each family are individual and call for separate and distinct attention.

In submitting floor plans and so-called models it is with the thought of showing the possibilities and re-



The simplest type of the efficient kitchen.

sources of this long neglected part of the house. Although there can be no one universal model floor plan scientific study of the needs and conditions of the kitchen have shown us that there are fundamental rules which must be considered in every kitchen, whether it is large or small, for the rich or for the poor. The consideration given these rules determines the efficiency and beauty of the kitchen.

Every kitchen must consider:

1. Size or compactness.
2. Grouping or relationship.
3. Exposure.
4. Ventilation and lighting.
5. Sanitary conditions.
6. Side walls, floors and woodwork.
7. Heat for winter.
8. Hot water supply.

The size or compactness of a kitchen is greatly affected by the size of range, refrigerator, sink and requirements as to storage; also by the size of family and amount of work to be done in kitchen. A butler's pantry also affects the needed wall space of the kitchen. The reasons are obvious. Large equipment takes wall space. Much preparation requires a greater supply of utensils and working tables. Large quantities of material take greater storage capacity and a butler's pantry cuts down dish cupboards in kitchen. I am frequent-

ly asked to give my opinion of butlers' pantries. Personally I think the added expense is well worth while. It should have a sink and ample drainage or it loses its greatest usefulness. The dining room dishes should never be taken to kitchen,



Kitchen arrangement showing platter cupboard and pantry beyond.

but should be washed in this sink, thus saving many steps, much breakage and further relieving the kitchen of much congestion and confusion. The cost of a pantry sink is in the balance against the time and energy which the housekeeper must spend carrying back and forth.

Great care should be used that the distance between the kitchen and dining room should be the narrow way of pantry, thus involving the fewest possible steps.

The second fundamental rule studies the grouping and relationship of the chosen equipment to avoid useless and unnecessary motions.

Under this rule there are four separate types of work to consider in every kitchen and around which every utensil groups itself.

1. Preparation and cooking of the meal.
2. Serving the meal.
3. Clearing away of food and cleaning up.
4. Storage of food materials and utensils.

These are the four functional demands and the successful circulation of the work depends upon the best grouping of utensils employed. For instance—

Preparation requires within easy reach of each other the following groups:

Range, work table, cooking utensils, refrigerator and supply cabinets, bins, etc.

Serving process requires:

Dish warming equipment, trays, carving utensils, and platter closet.

Clearing process:

Refrigerator, sink and towel equipment, dish cupboards and pan closet.

Storage:

Extra dish cupboards, extra supply cupboards, table board closet, broom closet.

Exposure.

The placing of the kitchen in relation to the rest of house, the doors and approaches is most important. Because of the seriousness of this point many wise people begin with the kitchen and plan the rest of the first floor to fit its needs.

Ventilation.

A most important thing in every kitchen is the matter of ventilation. Secure cross ventilation when possible. When cooking a top outlet should always be open to carry off odors and smoke. Every range should be properly vented that the

products of combustion, the steam and grease of cooking may be carried off. The vent pipe should carry above the roof and be of sufficient size to insure its proper working where the gas range is used.

Provide ample artificial as well as daylight for the range and sink. Great care should be used that the worker does not stand in her own light. Direct sunlight is necessary for every kitchen for some part of the day.

Sanitary Conditions

These especially involve the plumbing and drainage of sinks, refrigerators, etc., but this also applies to every other part of the equipment and especially the care and use of utensils.

Much of the beauty of kitchen depends upon the choice of color and material of side walls, woodwork and floor. The choice of materials in each instance should be made with an idea of the minimum amount of care necessary to keep kitchen clean and attractive. Eliminate every ledge, crack and corner. Ledges can be overcome by filling space to ceiling with overhead cupboards—these can be used for the storage of materials not constantly in use. Cracks should be avoided because they are hiding places for dust and vermin. Rounded corners should be used wherever possible.

Every kitchen needs heat for winter and provision for hot water throughout the year. Ordinarily the heating plant provides hot water for the winter months, and a gas or coal heater installed in basement provides for the summer months.

Every kitchen should be as small as possible, with ample equipment and storage, but stripped of everything unnecessary.

Provide the best materials and equipment that can be afforded, for nothing yields greater returns in the welfare and comfort of the family than a well equipped and wisely managed efficient kitchen.

Homes Recently Built

Contributed by Keith's Readers



NOTHING is so interesting to the home builder as a house, and more especially the home of a friend or an acquaintance, in the process of construction. In looking through a house one can nearly always distinguish between a "house built to rent" and "somebody's home." Limitless possibilities are before it while the house is still building. The visitor notes the conveniences and the clever way in which certain problems have been solved, and his wife decides she must have certain things, or that with some little convenience another vexing question may be settled. The other man's house helps him to make

his own home more to his satisfaction.

When their homes are completed Keith's readers often send photographs and some little comment. Those who have been studying the plans would like to know how they came out. Here are a group of these homes, many of them photographed by the owners themselves. Some of these you may have seen among the designs. Perhaps you may have,

yourself, just completed a home which you feel solves some other problems than those shown here. Other home builders would like to see what you have done. When you send the photographs try to send ones that shall be satisfactory and give an adequate idea



A charming home in Michigan.



This Louisiana home has an inviting veranda.



A compact home in Wisconsin.

the walls of the house. The vines make an effectual screen for the end of the porch, and the placing of the flower boxes is effective.

Another home built in Louisiana has an inviting veranda the full width of the house and with clambering vines and porch baskets. The great dormer filled with casement sash pleases

of the house to one who has never seen it.

When a man builds a house he not only provides his family with a home which will be more or less satisfactory to them, depending on the wisdom of his planning, but he also adds a distinctive feature to the neighborhood in which he has built. A vacant lot whether beautifully green, or disfigured with debris and rubbish, has been changed. In real estate terms the lot is "improved." Some times as a matter of fact it is not an improvement. But this is what the builder is doing: either he is making his neighborhood a better place to live or he is not fulfilling his opportunities.

A man builds the interior of his house for himself and his family, but he builds the exterior for his neighbors to live with. Here is a charming little home built in Michigan. The house itself is very simple. The posts of the porch have been given the same treatment as

the eye and carries the interest above the porch. The owner regrets that the photograph is "not so good as it might be as it does not show the pretty south gallery." It expresses comfort in a sunny southern clime.

Quite different, as might be expected, is the compact house built in Wisconsin, which shows that it was built to keep people warm in the most severe weather. When asked what changes they would make if they were starting now to build over again the owners said that they would make the kitchen smaller, as small



Set among birch trees in Michigan.

as might be, and add the space to the dining room. People are coming to realize that the small kitchen, when it is planned for convenience, saves much work for the housewife. The owner says "The feature I like best about my house is the living room with the bookcases, fireplace and seat on the inside wall at the end of the living room and the kitchen on the other side of that wall. The kitchen is entirely isolated, and when entering the front door one gets just a pretty view through to the dining room which is in blue, the walls in panels of delft blue leatherette. In speaking of the plans and specifications

says that even though it might have cost him a little more in this way, he has what he wants and that is worth the difference in price, for "if one has to live in a house and be discontented there is really nothing to live for." In owning one's home the improvements made are for oneself. It also gives one a right to say something about the street improvements. The owner also mentioned the convenience they had found in having the refrigerator built in the wall of the entry, with the doors facing in the kitchen while the ice door opens on the porch, so that the refrigerator could be filled without the ice man



In the Selkirks of Canada.



A substantial home in Texas.



the owner comments on the carpenter losing no time figuring out what he is going to do as everything was carefully planned and specified. The owner purchased the materials used in order to be sure that there should be no substitution of inferior materials, and that the lumber should be of the quality called for. He

tramping through the kitchen to the detriment of the floor and the temper of the cook.

Another home set among the Michigan birch trees has a magnificent setting, though the views which show the setting are not so good of the house. It has the beauty of the white house among the trees.

Another home comes from the Selkirks

of Canada. The photograph does not do justice to the house because it is still too new to have the shrubs and vines about it which a few years will bring, and which add so much to the beauty of the older places.

Next is shown a substantial home in Texas. Two views are given, the front facing south, and the east side. The side view shows the entrance at the grade level, which presumably leads down to the basement and up a few steps to the first floor. This view also shows the well beside the rear porch and the arbor over it. Above one sees the windows of a sun room or sleeping porch.

Another interesting little home built in Pennsylvania, has the second floor rooms



An interesting home in Pennsylvania.

under the roof, giving practically a full story, with the dormers and good windows in the gables.

This home, built in Ohio, has a porch across the front of the house swinging on an eighteen-foot circle at the side and extending back fourteen feet. The house sets well back from the street. The roof is of slate, giving a good color and a

protection against fire. The living room library and dining room are finished in oak, the rest of the house in quarter-sawn yellow pine.

On the second floor two good rooms have been finished and two storage closets.

Vines, ferns, and the growing things show their appreciation of the owner's care and make his home attractive.



This home was built in Ohio.

“Rest Cottage”

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NAMING one's home is rather a pretty idea, when the name fits so well as to give it meaning. It is a custom of the old countries, which has never seemed to flourish here, to any great extent. Rest Cottage is certainly a desirable name for a home, especially if the name can influence conditions.

doors. The bed rooms and the bath room are formed into a suite by the connecting hall, which also connects with the kitchen and living room. The living room is very good in size, being fourteen by seventeen feet. A great fireplace with book cases and high windows over fills the end of the room. The outside chimney is built of



“Rest Cottage.”

George Palmer Telling, Architect.

The five room house forms the nucleus for the larger house. Five rooms well arranged on one floor may be extended or rooms finished on the second floor to give as many rooms as may be desired, but the initial arrangement is vital to the house.

“Rest Cottage” presents a charming exterior with an excellent arrangement. The entrance is directly into one end of the living room. The dining room connects with the living room by a wide opening, but may be shut off when desired by sliding

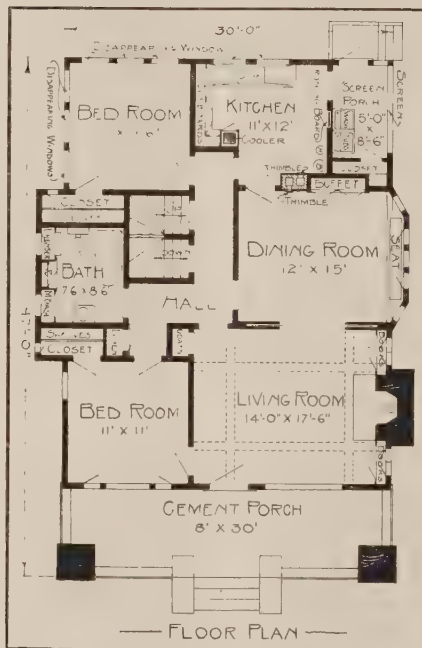
boulders as may be seen by the photograph and the fireplace and chimney breast, where it extends into the living room, is also built of boulders, with an opening sufficiently large for a great roaring log fire.

A bay of five windows fills one end of the dining room, with a seat under the window. It has a built-in buffet opposite the living room doors. Twelve by fifteen feet gives a good-sized dining room. The bed rooms are not large but they have good window and wall space, and

each has good closets. A linen closet opens off the hall and a coat closet is opposite, opening off the living room. The bath room is unusually large with a built-in dresser and medicine closet. These cupboards in the bath room are the source of great comfort and convenience. From the hall, stairs lead down to a cement cellar, and over these other stairs lead up to the attic space under the roof, which may be finished for sleeping rooms if desired.

An unusual feature of this house are the windows in the bedroom and kitchen. They are called "disappearing windows," and they change these rooms into sleeping or screened porches whenever desired, and in a very simple manner. The window stool is hinged and the window, which is on weights, may be dropped down into a pocket in the wall, leaving the entire space open, thus turning the bedroom into a sleeping porch, and making an outdoor kitchen. A storm comes up, or a cold wind, and with a touch the windows are again in place.

The kitchen has good cupboards and



a "cooler," built on an inside wall and ventilated at the top and near the ground, so it is always cool. Another unusual feature of this plan is the ironing board fitted into a pocket in the wall when not in use, or so that it can be dropped in position ready for work. On the screened porch are set the tubs for the laundry work, and beside them is a closet. Think how many steps are saved by having a closet beside the wash tubs, and how many things would go into it with

scarcely an extra motion. The entire house is planned with thought for the housewife and in the endeavor to save her unnecessary effort.

The exterior is very simple and as often the case with simple things it is very attractive. Cobble stones have been used very effectively in the porch and the outside chimney.

Wide projecting eaves over the dormer as well in the main roof are effective, with their exposed rafter ends.

The Narrow Lot

THE real estate man has wished the narrow lot on the home builder. Not only is this true in the crowded cities, but to a much larger extent than is necessary in smaller places where there is no congestion of the population in a given

vicinity, and no other reason for the small lot than the fact that people will accept what is offered and seemingly forced upon them rather than take the initiative in an effort to get what they want. If people will buy a forty-foot lot and pay practically

the same price for it that they would for a sixty-foot lot, that is the way new additions will be platted. So many houses have been built by the investor with the idea of selling before the house is completed, that he has not felt it necessary to consider very fully the matter of depreciation of values when other houses shall have been built on each of his lot lines. But to the owner of a home this is a very important matter. He puts a good house on his lot and the value of the property should in-

entrance is at one side through a covered stoop, which has a seat built in on one side, and a vestibule, into the stairway hall. A coat closet is conveniently near the entrance. A good sized living room fills the front of the house. The wide fireplace is the central feature of the room, and forms a recess through which the dining room is entered. A bay of five windows fills one side of the dining room, and beyond is a large sun room which is entered through French windows. The sun room is fitted



Here is a design planned especially for a narrow lot.

W. W. Purdy, Archt.

crease with the passing years if he keeps improving both house and grounds as the change of times suggests, but what can he do with a narrow lot? On the other hand how much more attractive would the same house appear on a fair-sized lot; how much more air and sunshine would he get, when air and sunshine mean so much to growing children; and how much would an extra fifteen or twenty feet increase the value of the property should he wish or find it necessary to sell.

Knowing the disadvantages of the narrow lot, the architect must plan to utilize what space he has at his disposal in the most advantageous way. Here is a plan designed especially for the narrow lot. The

with casement sash and screens. From the kitchen two steps lead up to the stair landing so that the main stairs can be reached either from the hall or the kitchen. The basement stairs are under the main stairs, with a door at the other side of the kitchen. Working shelf and bins are in the pantry under the window, while cupboards fill the other side. This arrangement allows the baking to be prepared outside of the kitchen. There is space for the refrigerator in the entry.

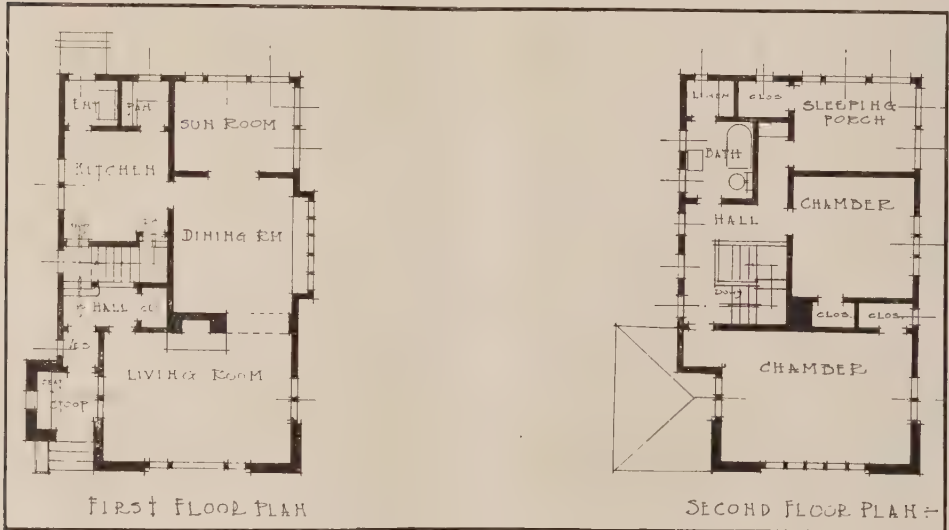
On the second floor the front chamber is unusually large, light, and airy. The third sleeping room is really a sleeping porch, as two sides are glazed. It has a good closet, as have all of the rooms. The

bathroom is centrally located, and has a large linen closet opening off of it.

There is no attic but the insulation between the roof rafters prevents the bedrooms from being hot in summer. The

basement is complete with laundry, fuel and furnace rooms.

Rough cast white cement plaster has been used on the exterior walls and on the soffit of the cornice.

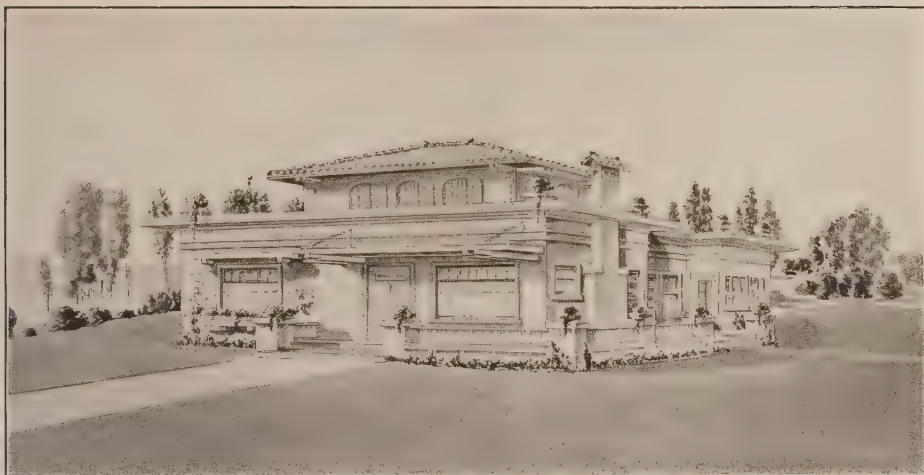


A House with a Roof Garden

CROWDED communities are beginning to take advantage of the roof space and utilize it with the design of their buildings. The home builder has not as yet given much thought to the possibilities of the roof. For that reason we are glad to show this simple "bungalow plan," with a real sun parlor on the second floor, which has a balcony all around it. This second floor room will be very light and airy, either open air or enclosed as desired, and may be used for smaller sleeping rooms, or a large room. The roof of the second story has wide overhanging eaves and a tile roof. A terra cotta tile may be used, or some of the metal tiles may give a very good appearance. The roof of the main house

is covered with sheet roofing and serves as a balcony about the sun room.

A terrace extends nearly around two sides of the house. The front entrance is protected by a canopy but the rest of the terrace is uncovered. The living room and dining room are separated only by bookcases. The fireplace and seats make an angle of the end of the living room. The den, adjoining the living room, is fitted with one of the newer types of "disappearing bed." When not in use the bed is pushed back into the space under the stairs and in one end of the dressing room, only projecting into the den under the desk, or making a seat if the desk is not built-in. The dressing room has space for a dresser and for per-



A real sun-parlor on the second floor.

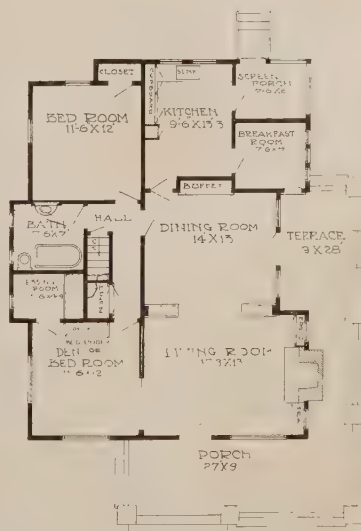
Bungalowcraft Co., Archts.

sonal articles which would not be in place in the den. Such an arrangement permits a room to serve this double purpose in a satisfactory way and not as a temporary makeshift. The small private hall connects the den as well as the bed room with the bath room, and with the rest of the house.

The dining room has a built-in buffet opposite the living room, and opens on the terrace by French doors. The kitchen is fitted with cupboards, a well lighted sink, a "cool cupboard" and a good screened working porch. The small breakfast room is well located, opening directly from the kitchen and with a glass door onto the terrace. One side of the room is filled with windows.

The breakfast room holds rather a unique place in modern planning. Originating in the great mansion where it was unnecessary to open the great dining room for the morning meal, it has been accepted by the housewife who is her own cook, as a means of simplifying her manifold duties. It is a room which easily adapts itself to manifold uses. The August number of Keith's devotes some space to the breakfast room, its uses and its treatment.

The house is of timber construction, with heavy wood framing sheathed with inch boards. This is covered with metal lath and given three coats of cement stucco. The architect tells us that this house has just been completed in California for \$4,000, which would be increased by \$500 more in a locality where complete basement and heating plant must be included.



A Two-Story House That Is Up-to-date

TWO things have influenced people to build what used to be called "story and a half" houses. It seems that they ought to be cheaper because they are not so high, and perhaps not quite so large, and on the other hand the broken roof lines and the dormers, if well handled, add a larger element of the picturesque. As to

use and glazed in winter. One enters a central hall with the living room on one side, opening with a wide columned arch, and the dining room on the other side which may be closed off with sliding doors. Beyond these openings is the main stairs which fill the farther end of the hall. The stairs start from a platform and two steps,



The second story overhangs the terrace.

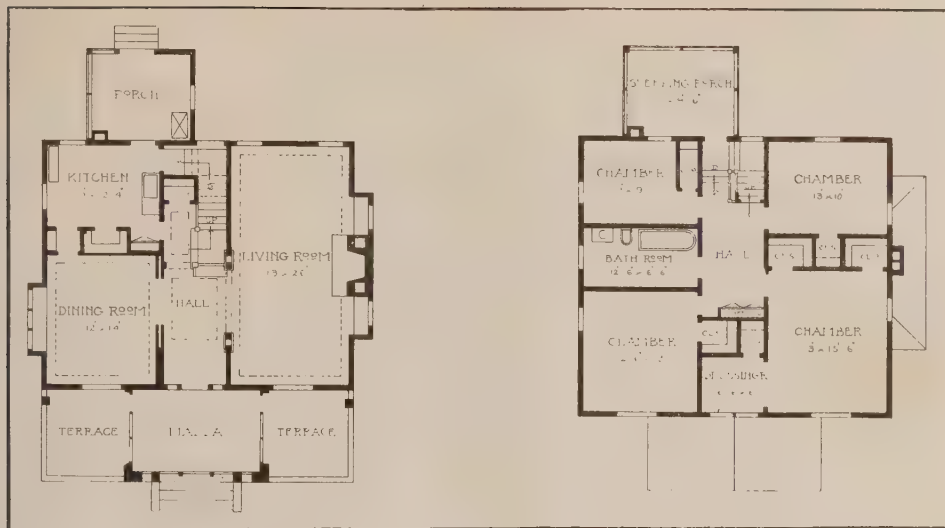
Chas. S. Sedgwick, Archt.

the rooms under the roof, while they are not so large, at the same time they require more framing, and sometimes add in labor what they save in material. As to the element of the picturesque, we may hope to achieve it accidentally, but it is really an art to be attained through its own proper channels. The architect devotes the best part of his life in learning how to accomplish this, among other things, for you.

This is a full two story house, with the second story overhanging the terrace by a small space. There is a covered piazza at the entrance which is screened for summer

so arranged that they may be used from the kitchen as well as from the front part of the house, so that rear stairs are not needed. Under the last run of the stairs is a good coat closet, opening conveniently from the hall.

The main living room is very attractive, with windows on three sides, and is recessed for seats on either side of the wide fireplace. The living room is finished in oak with oak floors, as is the hall and also the dining room. A bay in the dining room gives place for the built-in buffet with windows over it. A small pass pantry connects



the dining room and the kitchen, with a good storage pantry beside it. The kitchen opens into the main hall, and should have a spring hinge on the door to insure its being kept closed. The stairs to the basement are under the main stairs, with an entrance at the grade level, giving direct communication from the outside. Beyond the kitchen is a partially enclosed working porch which is screened, and which has a place for the refrigerator. The woodwork of the rear portion of the house is of pine which has been given a natural finish.

The second floor has four good chambers, a large bathroom and a sleeping porch. From the large front chamber, which is presumably the owner's, there is a dressing room, which has a closet in addition to the two good closets that open directly from the room. There is a linen closet in the hall and each chamber has a good closet. The sleeping porch is reached from the

landing of the stairs, or it may connect with the adjoining bedroom. The second floor is finished in pine and painted in white enamel, with birch floors.

The large attic space has been left unfinished in this estimate. There would be space for three rooms and storage if desired. The architect estimates that this house, exclusive of heating and plumbing, can be built for an amount varying from forty-five hundred to fifty-four hundred dollars, which gives a wide margin for variation of details and conditions. The size of the house is 34 feet by 29 feet, with the greatest width facing the street. It is of frame construction with concrete foundations. The basement is 8 feet in the clear. The walls are back plastered and then plastered again, leaving a good surface for the finish of the rooms. The exterior of the house is finished with cement stucco on metal lath.



A bungalow with cedar lap-siding.

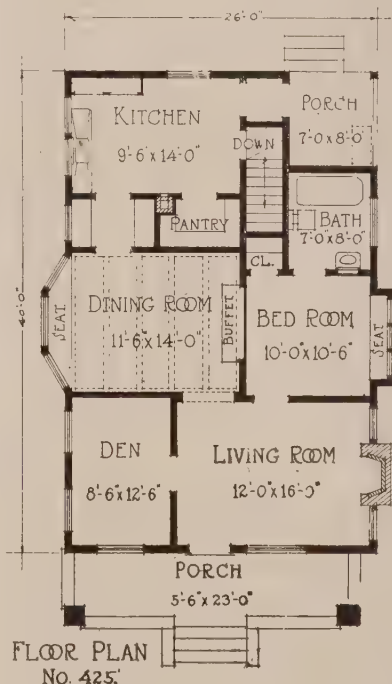
Jud Yoho, Archt.

A Small Bunga- low

THE matter of intercommunication between the rooms is a great feature in laying out the plan. Shall the rooms open off the living room or off the dining room, or both, or shall space be taken for a hall from which all the rooms shall open? Where the conditions are such that one can have a private bath room in connection with one's bed room, it is a great luxury to have it open directly. This house is not large, twenty-six feet in width, accommodating it to a narrow lot, yet the rooms are fair sized. In plan the living room, which is twelve by sixteen feet, has a good fireplace at one end and the den opens from the other end of the room. Beyond the living room is the dining room, with a buffet at one end and a bay and window seat at the other. A serving pantry connects the dining room with the kitchen, adjoined by a storage pantry. The kitchen is well supplied with cupboards. The storage pantry is a luxury, which will be appreciated by the housewife. The sink is well lighted and conveniently placed with relation to the cupboards. Dishes may be washed and put away without a second handling. The stairs to the basement open from the kitchen in a convenient

way, and the screened porch has a good working space.

The living room, dining room and den are finished in slash grain fir, with plain oak floors. A beam ceiling is shown in



the dining room. The bath room is finished in white enamel. The fireplace in the living room is designed to give a maximum of heat. The detail shows a mantel which may be carried out in brick of any color or texture suited to the finish

and furnishings of the room and the owner's taste, to make it the heart of the house.

The exterior is covered with a wide siding; six-inch cedar lap-siding is here used with trim of surfaced fir.

A Charming Home



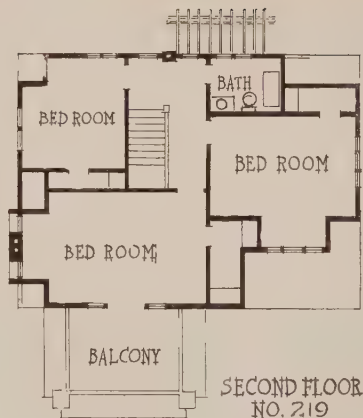
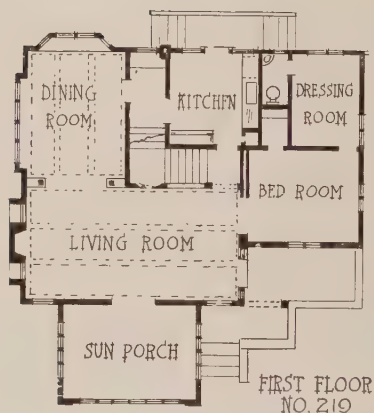
This charming home has attracted much attention.

Lindstrom & Almars, Archts.

BUILT on a quiet boulevard in an unspoiled suburb, this home has attracted considerable attention. It is very picturesque in its setting of trees. The main roof with its wide, overhanging eaves extends down over the main entrance and, carried on brackets, protects the terrace as well. The sun porch is a charming room as well as an open porch. The vertical lines of the casement sash and the tiled hood over them, the texture and color of the tiled roofs, the curved lintels of the window and entrance all give character to the house.

The roofs are of vitrified tile. The walls and gables are all stuccoed over metal lath on frame construction, the surface being carried unbroken to the ground.

The view on entering is very attractive. Opposite, at the farther end of the living room, is the wide brick and tile fireplace, recessed to bring the chimney breast flush with the wall. A columned opening, with bookcases in the pedestal, connects the dining room with the living room. Both living room and dining room have beamed ceilings. A buffet of special de-



sign, with mirror and windows above the shelf, is built into the dining room. The living room has light on three sides. It connects with the sun porch by French doors. The inward swinging casement windows on the sun porch allow all of the window space to be thrown open when desired. Sliding doors shut off the bed room from the living room. Connected with the bed room is a good dressing room, a private bath room and a good closet. This makes a very complete little suite of private rooms. The stairway makes another attractive feature. It may be entered either from the living room or from the kitchen.

In the kitchen is a sink with good tables. Kitchen and pantry cupboards are built to the ceiling. The ice box is well placed.

On the second floor are three bed rooms with large closets and a bath room directly over the bath room on the first floor and the kitchen sink, bringing all of the plumbing in very close connection and at a minimum expense. A balcony over the sun porch opens from the front bed room. The woodwork on the second floor is finished in white enamel with the doors in mahogany.

On the first floor the main rooms are finished in quarter-sawed oak, the bed

room is finished in Circassian walnut. The rest of the first floor, kitchen, pantry, etc., have birch woodwork, finished in the natural color.

All of the ceilings are tinted both upstairs and down. The walls of the living room are covered with Japanese grass cloth. The dining room walls are covered with cloth before being decorated. The kitchen and bath room walls are covered with sanitas. The sun porch has special decoration on sanitas.

In addition to the usual provision for furnace and fuel rooms, laundry, fruit, vegetables and storage, a billiard room has been fitted up in the basement. Outside stairs have been provided for the basement as well as the stairway from the kitchen which goes down under the main stairs.

Especial attention is called to the completeness and compactness of the first floor arrangement. The private suite allows the mistress of the house to go back and forth between the bed room and the kitchen with very few steps, and yet the two may be completely secluded when desired. Conservation of energy for the housekeeper is one of the phases of the ever-present servant question, in which the architect may be a powerful assistant.

Homes of Individuality

Selected by W. J. Keith, Architect

After the Manner of Our Fathers

NO one type of house, perhaps, has so many admirers as the white house with green blinds, especially when placed in a setting of trees. Here is such a home which has the dignity of the colo-

rage is attractive, very compact, and the stair landings are cleverly planned to bring each run of stairs to the desired location. Short flights of stairs, one from the reception hall and one from the kitchen reach the same broad landing



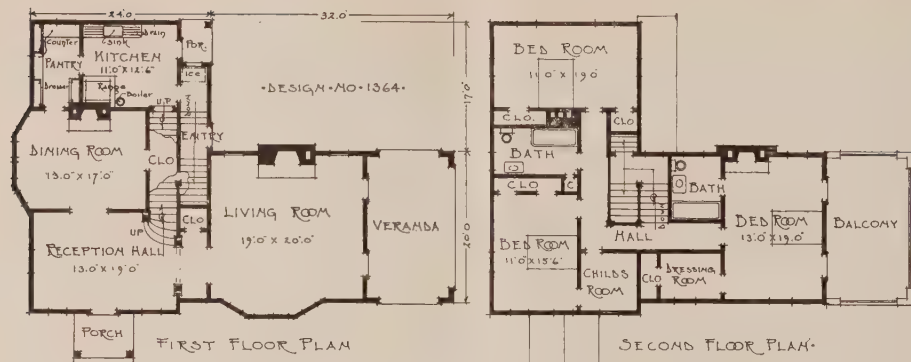
Such a home as one sees in the Berkshire Hills.

nial mansion and the convenience of a modern home. It is compact in its arrangement but the rooms are fairly large, and are so placed as to give an unusual amount of light and air; such a house as may be built anywhere except on a narrow city lot. The living room must always be cool, it would seem, even on the most sultry day, with windows on opposite sides and the veranda beyond. The wide fireplace makes it cosy on the dreariest day.

The entrance is into a spacious reception hall, with a wide opening into the dining room on one side, and into the living room on the other side, with a convenient coat closet between. The stair ar-

range and continue to the second floor, as shown on the second floor plan. From the kitchen entry three steps lead down to the grade entrance and continue to the basement under the upper part of the main stairs as shown on the first floor plan.

The kitchen arrangements are very compact and convenient. The ice box is in the entry with an ice door reached from the porch. The sink is well lighted, with good tables on either side. Care should always be taken to see that the kitchen sink is set high enough to avoid that tiresome stoop of the shoulders in washing dishes which does so much to tire the housekeeper when she is using a low set sink. The pantry is large enough to ac-



commodate a good work shelf with a window over and bins, cupboards and drawers under the counter, which extends around two sides of the pantry. In addition to this the pantry is well equipped with cupboards.

The fireplace in the dining room is back of the range in the kitchen and one chimney takes care of both. A great bay window fills one end of the dining room.

On the second floor a suite of rooms has been planned for the use of the owner. The bedroom, which has a good fireplace in it, has a private bath room opening from one end of it, and a dressing room with a good closet in connection. The

general bath room opens from the main hall which connects the other bedrooms. It is noted that by a somewhat different arrangement and slightly increasing the dimensions, one or even two additional bedrooms could be secured.

There is a full basement under the entire house, and the total width, including the sun porch, but not dining room bay, is 56 feet; depth 37 feet, not including living room bay or hall projection.

The exterior of this house is intended to be wide and heavy weather-board, painted white with green sash and blinds, and a dull faded-out moss green shingle stain for the roof.



Split quarry stone gives texture to the wall.

A Seven-Room House.

It is interesting to study plans which are similar in general arrangement, yet totally different in treatment and in size. This plan of a comparatively small house has points of likeness to the larger plan just shown. The entrance is into the living room, from which the stairs lead up. Back of this is the dining room, with sliding doors between, and at the end is the

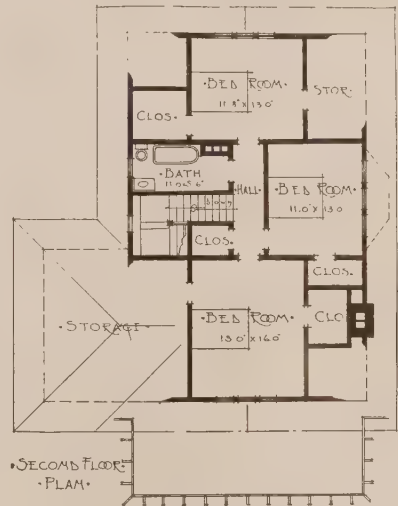
small porch could very easily be enlarged and arranged for outdoor dining.

The living room has, in reality, the width of the den added to its own length, making it an unusually attractive room. The fireplace, with book cases and high windows over them, fills one end of the room. The stairway, which starts from the center of the length of the combined rooms, is partly screened, so as to be more



den. The basement stairs go down under the main stairs with an outside entrance at the grade level. The first landing is up only one step and a door opposite the pantry gives a direct connection on the kitchen side.

A bay of windows fills one side of the dining room, which has a recessed built-in buffet. The working shelf with its bins, cupboards and drawers is placed under a window in the pantry, which has good cupboard space beside. In the kitchen is a cupboard near the range. The sink with its drain tables is placed under a window. The ice box is in the entry. A toilet which is shown as opening off the entry is very conveniently located. The



conveniently used from the rear of the house.

The second floor has three good rooms and a bath, in the space under the roof. The front and rear chambers are lighted by the windows in the gables, and fairly large dormers light the other room and the bath room.

The exterior of the house is very picturesque, built of split quarry stones to the broad overhang of the eaves, and gives the effect of a house all on one floor. The gables and dormers are shingled like the roof.

A basement extends under the entire house and is provided with laundry, fuel bins, and storage rooms.



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Color Courage



A GREAT deal of our decoration is feeble and ineffective because we have not the courage to use strong color. We are wedded to low tones, and too often low-toned is merely a synonym for washiness. Walls are distempered or papered in pale colors which would be charming for bridesmaids' frocks, but are absolutely ineffective as backgrounds for furnishings, for pictures and for ornaments. A great deal is said about pastel coloring which is misleading. Pastel colors are not pale colors, they are strong colors toned down. I have had occasion before this to quote the saying of William Morris to the effect that we should use clear, bright color in our rooms, that if mud was needed there was a plenty of it in the road.

I am quite aware that I have been, and still am, a consistent advocate of a neutral toned scheme of color for the average house, especially for the house of moderate size, whose ground floor is so arranged that every room is more or less visible from every other. But every rule has its exceptions, and when the rooms of a house are fairly large, and when, as is the case with houses of the Colonial type, each room is isolated from the others by ordinary doors, which are frequently kept closed, strong color schemes can be used with much success. Indeed the larger the room the more desirable the employment of a wall of strong color, especially if the furniture is antique or modern reproductions, because a room furnished in that style should never be

crowded with pictures and ornaments, and great expanses of neutral tinted wall are extremely uninteresting.

The Charm of Red.

I have had occasion to mention the return to favor of red. The best reds for decorative work are not pure reds, but have a blue tone. The best red is what used to be called crimson, which is at its best in the old, red, Italian velvets, whose color and exquisite patterns are a constant source of inspiration to designers. Such velvets are generally to be seen in the shops where antique furniture is sold, and a study of them is the best guide which I know of for the person who meditates a room in red. Something, indeed, is to be said for the use of vivid scarlet, but the deeper shades of pure red are seldom advisable for walls.

The Scope of the Red Wall.

Red has, more than most colors, its limitations, especially when applied to walls. It is emphatically a color for the dining room or hall, rather than for the living room or drawing room. It has an irritating effect on the nerves of some people, and is rather trying to the eyes, which makes it desirable to confine its use to rooms used only for part of the day. It has, too, the effect of making a room seem smaller than it really is, and that quality also restricts its use. It needs sunshine and I think it is at its best in a dining room with a southeast exposure, which gets the early morning sun, and indirect sunshine at midday. As the evening meal is generally eaten by

artificial light, the lack of sun in the latter part of the day is immaterial. Red absorbs a good deal of light, but a large dome will shed the light onto the dining table and the dimness of the rest of the room is immaterial.

If the furniture of the dining room is mahogany, the woodwork should be white; if it is brown oak, the woodwork should be stained or painted to match. The darker tones of mahogany look best against a red wall, the lighter coloring being too red and of a conflicting tone. Golden oak, which is generally impossible, is not quite hopeless against a crimson wall, and old-fashioned walnut furniture is very good indeed.

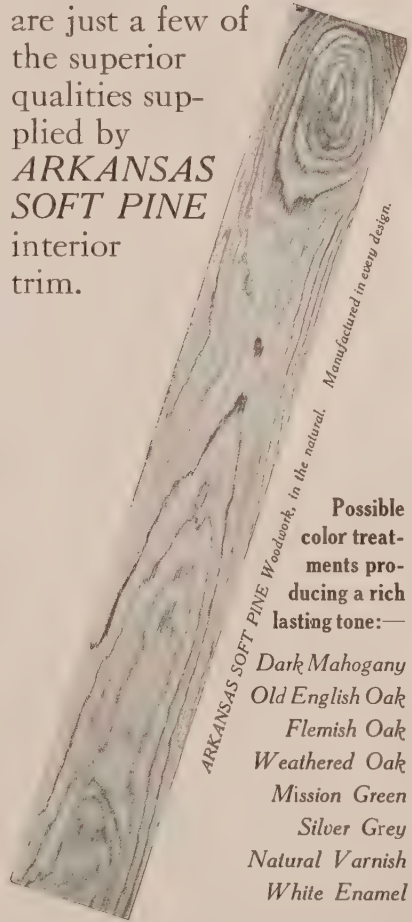
The charm of the red walled dining room, apart from its cosiness, is that it is such a capital background for the sorts of things one has in a dining room. It looks awfully well with oil paintings, with silver, with brass, with most sorts of china. Blue china does not affiliate with it, but not everyone owns or cares for blue china. If one wishes to see how well a backless sideboard, set out with silver, can look against a red wall, there is, in the Metropolitan Museum, in New York, a silver room, whose walls are lined with crimson brocade, to the great advantage of the silver. Pewter looks equally well in a red setting, though it is at its very best with a low toned blue wall.

For a well lighted hall, or for one which depends almost wholly upon artificial light, a red wall is an excellent choice. It has a furnishing quality, especially if the pattern chosen for the paper is fairly large, which commends it for the small hall, as furniture beyond the absolute essentials can be dispensed with, nor are pictures needed, though blacks and whites in narrow black frames, with wide margins will be found to be especially at home on the red wall. Red is such a cheerful color, and so much liked, especially by men, that a red hall is sure to give a pleasant impression to the visitor.

The red wall has the advantage of agreeing with most Oriental rugs and with their derivations in Wilton and Axminster. Another phase of the furnishing quality of red is that it often enables one to dispense entirely with a rug in the dining room, having the floor bare and highly polished. A charming relief to a

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deep red wall may be had by using curtains of printed linen, the design copying old crewel embroidery on an ecru ground. Such designs often have crimson flowers, which harmonize with the red of the wall.

Tomato Red in the Drawing Room.

In a room with a great many pictures and ornaments, with upholstery in the dull blues and browns and greens, which you see in old tapestries, when no one thing in the room has any very positive color, but the whole is blended into a harmonious whole, like a cashmere shawl, a good background is a tomato red. It goes better with white woodwork than golden brown or old gold, either of which might be recommended, and though no better, perhaps not so good, for a background as gray, is yet much more cheerful. It is particularly charming in a room with a western exposure, in which the sunlight is less brilliant than in a south room.

Turquoise Blue.

The turquoise of decoration is by no means to be confounded with the usual lighter shades of blue. It has absolutely no suggestion of gray, is deeper in tone than the stone, is usually also greener. Its most obvious associate is yellow, a clear, brilliant yellow, and you sometimes find the combination in Italian pottery. Turquoise also combines well with the greenish yellow, called citrine. It is difficult, but not impossible, to find a turquoise wall paper, but once obtained it is an ideal setting for mahogany in its lighter tones, for satinwood, and for marquetry.

With much brass and gilt, furniture coverings and curtains of some silk fabric in yellow and ivory, colored mezzo tints, a little porcelain and a rug, either a deep greenish blue, or an Oriental in a very small pattern in brown ivory and blue, one can have a delightful formal parlor, which will be quite unusual as well.

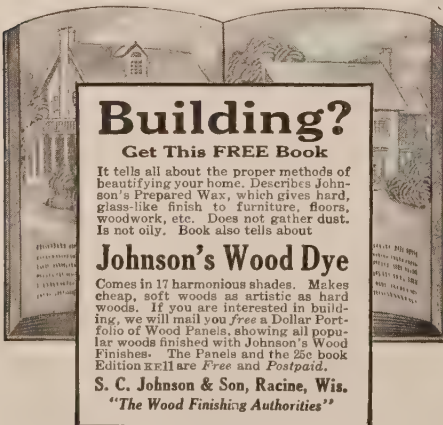
A Blue and Green Scheme.

The combination of turquoise blue and yellow is hardly suitable for any but a formal room, but it is possible to use a turquoise wall for a living room, by choosing furnishings which will be in a subordinate key, so that the blue of the wall will be the high light of the composition.

For this use the woodwork should be dark, a very dark oak, or a weathered green, though the latter will require the use of green furniture as well. There are many charming textiles which combine blue and green, either tapestries or silk damasks, and one of them can be chosen for the covering of the furniture. Then the carpet can be a deep moss green, the curtains sun-proof or changeable taffeta in blue and green. Whatever metal is used in the room should be bronze of greenish tone, and for ornaments a pair of Chinese jars in grayish white with the decoration in dull greens and a little yellow and rose, a single piece of light green celadon and, so placed that it is not near the wall, a distinctive bit of turquoise blue Japanese pottery. The pictures should be prints in black frames, and vivid yellow or orange flowers will be at home in this setting. The turquoise wall will be found far more effective than what is so common in rooms of this type, the wall paper of low toned green.

The Bedroom Out of Nothing at All.

In furnishing a small bedroom out of nothing in particular I would suggest the use of a turquoise wall. With it for a background, the furniture may be white enameled wood with a flowery cretonne for curtains, the patterns being small pink roses and green leaves. Or with the blue wall the furniture can be painted either apple green or yellow, a flowered muslin in green and white or yellow and white being used for curtains and bedhangings. Still another use is with weathered green furniture with copper trimmings.



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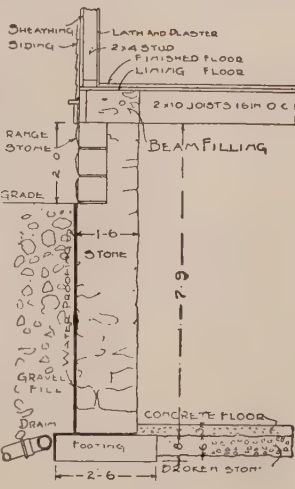
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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

EDITOR'S NOTE.—The courtesies of our Correspondence Department are extended to all readers of KEITH'S MAGAZINE. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Finish for a Flat.

E. L. H.—Being a subscriber of your magazine, I have read each copy thoroughly, but was unable to find just what I wanted so am writing to you.

We are building a six-room flat and are undecided as to what finish would be best for the woodwork. For our den we have fumed oak furniture with brown leather. Dark tan rug and over draperies for windows about the same shade. Brown and tan leather portieres for door between den and living room. We have fumed oak furniture with green leather and green over draperies in the living room, green and tan rug, green portieres between living room and dining room, where we have mahogany furniture, green rug and green over draperies, and for our two bedrooms we have mahogany furniture.

Ans.—We advise a fumed oak stain for den and living room, with white enamel for dining and bedroom. If you do not like the white enamel in dining room you can stain wood trim mahogany, but the white will be the prettier with the green rug and over draperies. With dark woodwork, the room will be sombre. Grey walls would be best in living room, pale tan in den, and in dining room a decorative paper on upper part of wall above a grey wainscot.

Exterior Color Scheme.

B. A. D.: We are building a bungalow 34x42, and would like suggestions for painting the outside. The roof is shingled with red shingles. The three gables are shingled but shingles are not stained. Cobble stones are used for chimney and porch foundations and pillars. What would you think of two shades of green with white trim? There are several evergreen trees close to the house so it is quite shaded in front.

What sort of draperies would you sug-

gest for casement windows in den and dining room, where the woodwork is the natural quarter-sawed oak? Also, for French door in bedroom where woodwork is natural oak?

Ans.—With the copper red roof shingles and cobblestone treatment, we think simply brushing the shingle in gables with linseed oil would be preferable to staining them green. That is, if red cedar shingles have been used. The red cedar takes on a very soft pleasing light brown tone, when oiled. If pine or cypress shingles have been used, then stain a light brown. With a cream white trim we think you will find this a pleasing color scheme.

Some of the Sunfast materials are excellent for draping casement windows in den and dinner room. If the windows swing out, hang draperies inside the frame; if they swing in, a good way is to hang a 10-inch valance from a rod set on top of casing with side pieces running from under the valance, set so as to clear the window when opened.

For French door in bedroom, cream net or figured lace, shirred on small brass rods set on the sash of door, top and bottom.

Casement Window.

F. W.: Ever since father sent for all of Keith's books of plans, and subscribed for KEITH'S magazine, I have read with a great deal of interest the answers to the questions on interior decoration; and now I wish to ask if you will help me with suggestions for the walls, rug, hangings and furniture of my bedroom. I think mine will be the front room, with a north-western exposure, French doors onto sleeping porch, and fireplace, with small window and bookcases below. Now I have always wanted a lavender and white

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ANSWERS TO QUESTIONS—Continued

bedroom. Could I have lavender in a bedroom with that exposure? I would like casement windows, but father says they are not practicable.

Ans.—I am greatly interested in your letter. First—"Father" is mistaken in the casement windows. Formerly they were unsatisfactory, but the improved fasteners make them entirely practical—in fact, personally, I consider them better than the double hung windows. I have just built two new houses, adorable casements in both. In our hardest storms, not a drop of water enters, but they must be properly set, and the improved fastener used. Some of my casements open out. Those that open out have the screen placed inside, with a little slit at the bottom to allow the adjuster lever or handle coming through. This is worked inside, and you open the window without moving the screen. Now if you have the casements open out, you attach the *shade* to the screen inside. Also, the little thin curtain, or you have a valance of cretonne across the top and on outer sides without any thin curtains.

Lavender and white will not be a good color scheme for your northwest bedroom, but ivory and rose will be delightful. The woodwork must be ivory, and a rose-colored wall. The ivory furniture you refer to will be charming. Your bed must have *cream* spread, not white. The willow chair will be good, so would a dress box at the foot of the bed, covered with the cretonne.

The mantel must be, of course, in the ivory, and facings of deep rose-colored tile. The French door should have cream net shirred on small rods top and bottom

Color of Fireplace Brick.

M. W.—I am building a bungalow. The living room is 23x14½. The walls are to be in French grey with mission woodwork. I am furnishing it with French grey wicker and flowered English cretonne cushions. The fireplace is at the end of the room with French windows on the side opening onto a pergola. Can you give me some ideas of what colored brick to use for the fireplace?

Ans.—We think a Roman brick, in a warm, putty grey, would be the best choice for the fireplace brick. Lay up the brick in nearly white mortar.

Treatment for Floor.

E. L. H.—I wish to thank you for suggestions offered in your recent letter. We have decided to use white enamel for dining room, bedroom, and would ask you to advise as to how we should treat the oak floor or would it be better to use birch floor? What color should it be stained?

Ans.—We should use the same floor in dining room that you have on living room and hall, and treat all the floors the same viz., stain slightly, then fix with filler, wax and polish. The white woodwork in dining room does not require any special treatment of the hardwood floor. Either oak or birch can be used throughout.

Suggestions for Furnishing.

J. T. A.—I am enclosing a diagram of floor plans for our new semi-bungalow home and wish suggestions for interior decoration.

The house faces north giving the living room a south, west, and north exposure and the dining room a north and east exposure. The woodwork in these two rooms will be fumed oak—with built-in buffet in the dining room and built-in book cases in the living room on one side of the fireplace which is of quite rough tapestry brick—almost a deep mulberry in color.

For the living room we have a dull mahogany grand piano, a large overstuffed tapestry chair, a fumed oak davenport, a fumed rocker and also one of brown wicker. We may get a tapestry davenport to match the chair and in that case, would you suggest getting our new furniture to go with the mahogany piano or rather to harmonize with the woodwork? We have a 9x12 Anglo-Persian rug to use in this room—the predominating color being mulberry with soft old blue figures.

The spare bedroom (east) will be papered in yellow and for this room we have an old ivory enamelled set. Would it be better to have the ivory enamelled woodwork in this room rather than pure white? What color drapes would look well with the yellow paper?

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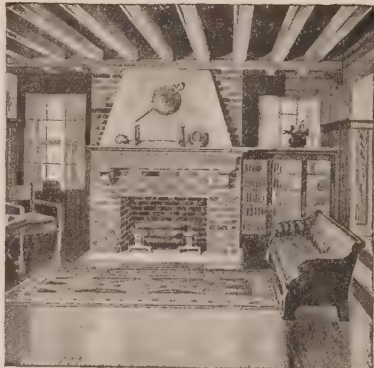
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ANSWERS TO QUESTIONS—Continued

we wish. This room is plastered except for the ceiling. What suggestions have you for the finish of this porch?

I am a very interested reader of your magazine and especially of the department on interior decoration.

Ans. Your diagram shows a splendid living room, with good light for any treatment. The sketch shows you have chosen just the corner for the grand piano. We should not, however, purchase the new furniture in mahogany, but choose pieces in harmony with the fumed oak woodwork and other furniture. It is not necessary these should be heavy. Some of the brown woods with dark antique cane seats and panels are very attractive and in tune with either oak or mahogany. It is also at its best when used with mulberry velvet, and we suggest this material for some of the chairs; as the figured tapestry of davenport and big chair will be enough figured material to use. The sample of mulberry curtain material enclosed is fairly good but rather dark, and we should much prefer a soft greyish tan for the wall paper. Your other ideas are very good. The blue paper sent for dining room panels is very good indeed, and the blue draperies will not be too much blue. The effect will be very pretty to use above the paneling, the soft tan with deep cream ceiling.

Your ideas regarding the west bedroom with grey wall and rosewood furniture, are very good indeed. We see nothing to change in them. Better to finish the doors a dark mahogany stain. There are extremely good grey and blue cretonnes that could be used for side draperies.

The old ivory enameled furniture will be charming on the deep cream stripe of paper you enclose and it would be much better to do the woodwork ivory rather than white. There is a cretonne showing soft pink and yellow roses that would combine well with this paper, and the rug could be tan with dull pink in border.

The sleeping porch would be pleasing with plaster tinted pale green and woodwork painted a shade darker green, white ceiling, white window sash, and floor painted a dark water green.

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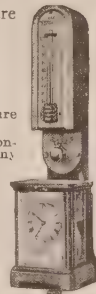
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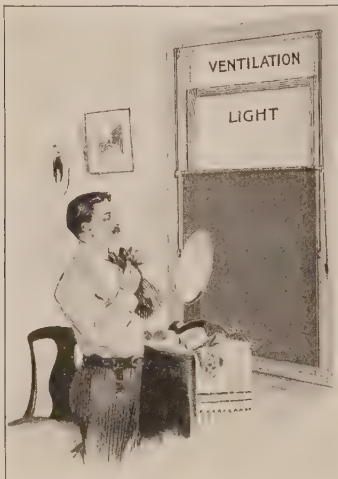
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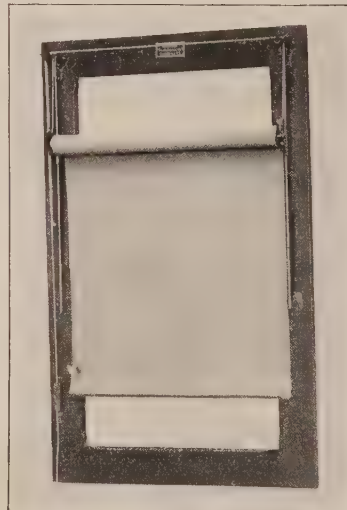
An Adjustable Shade



THE office building is filled with good sized windows in order to provide light and air. Heavy shades on spring rollers complete the windows, but the question of light and ventilation has not yet been completely solved. If the lower sash of the window is pushed up on a cool day, the desk is in a strong draft. If the upper sash is lowered, the draft of fresh air is good, perhaps, but there is a flood of sunshine or a glare of light, if the shade is rolled up to leave the space open. A flood of sunshine is beautiful, but it is very inconvenient on a table full of white papers, and



The shade may be set to cover any part of the window.



The shade roller is set on vertical bars.

impossible to work under such conditions. Pull down the shade and it rattles against the open window in a most disconcerting way, and spoils the shade as well as irritates the nerves. Draw the shade to cut off all of the sunshine from the desk and the light is insufficient. Verily it is a vexed question. Two shades may be installed, one pulling up and the other down, but even this is not a very satisfactory solution. One does not care for the shade roller on the window sill nor for the duplication of cords, even if the

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HOUSEHOLD ECONOMICS—Continued

additional expense is not a controlling element.

A shade carrier has been put on the market which promises to solve these difficulties. Instead of the shade roller being fixed and stationary at the top of the window, the carrier allows the rolled curtain to be lowered to a desired position. If the window is open at the top, the roller is lowered past the open space of the window. If the sun shines from the window directly on the desk, the rolled curtain is lowered to allow sunshine in the upper part of the window, and the shade drawn for protection just where it is needed.

This appliance is operated by means of vertical bars which are set where desired for the outer edges of the shade. Instead of screwing the shade fixtures to the head casing of the window, they are so set on the vertical bars, then the curtain rolls in the usual way. Another model shows a bottom control, which by also holding the lower edge firmly, prevents the shade from blowing and rattling, and increases the length of the life of the shade.

The shade carrier is recommended for

hotels and residences as well as for public buildings, since it protects the window opening at any point desired, without cutting out either the light and air. In hospitals and sanitariums it is especially useful; in the operating rooms as well as in the wards.

The school room is another place where this appliance has special recommendations, as filling its special requirements. The manufacturer says:

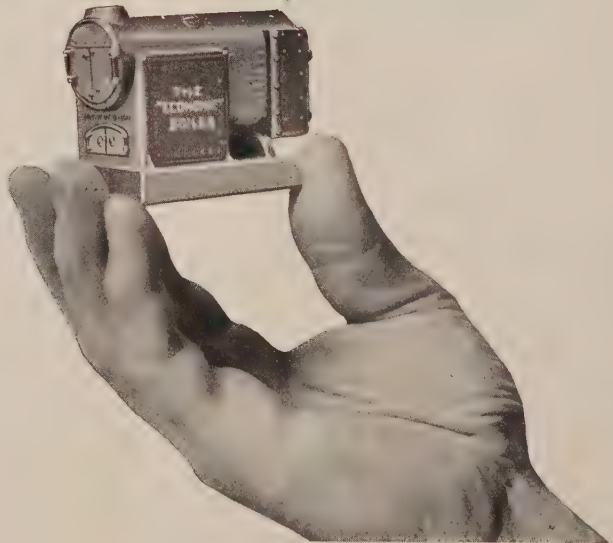
"The class of workmanship entering into the desk, whether oak, mahogany or even marble and precious stones, will not enable the employee to write any better than if the desk was manufactured of pine boards. But, and we insist we are right, if the office is well lighted, properly ventilated and cheerful, the employee can and will do better work and more of it. The fresh air and properly controlled light will make for red-blooded, vigorous employees, so that fewer in numbers will do the work for many more, and do it better, thereby increasing the efficiency of the force and assist by the saving in time and money, which saving will go toward increasing the dividend rate of the employer."

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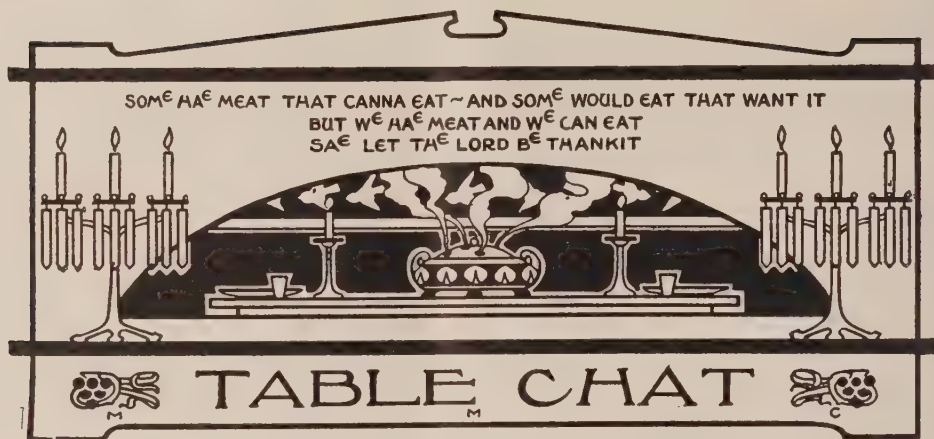
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The Thanksgiving Table



T is a pleasant arrangement of Providence that chrysanthemums are still in bloom at Thanksgiving time. The hothouse flowers persist still longer, but unless the season is specially inclement it is still possible to find flowers growing out of doors, and these the best of all, the small and old-fashioned button chrysanthemums, in white and clear yellow, rusty red and tawny brown. I have a great fancy for

these last. Put a mass of them in a tall glass, with some of the rusty red ones and a very few white ones and heap grapes and rosy apples and russet pears around its foot, and you have a delightfully autumnal table decoration, carrying out all the finer spiritual significances of the day.

The Thanksgiving Supper.

One of our illustrations shows the table set for the first course, with a much more



Set for a Thanksgiving supper after the football game.

commonplace arrangement of hot-house chrysanthemums, white and yellow, in a silver dish, and the meal suggested is not dinner, but the substantial supper which in these football days is so apt to take the place of the midday dinner. The setting is for a very simple meal, oyster bouillon, cold roast chicken with potato chips and salad, rolls and a caramel pudding, just an ordinary evening meal after an early dinner. I will suggest some more elaborate menus, hoping that they will meet the needs of some readers. When the Thanksgiving dinner must take such a secondary place, it is a good plan to have it on the succeeding Sunday, when there is abundant leisure to enjoy it, and when it may be easier to gather the family together.

Oysters on the half shell
Brownbread Sandwiches
Celery

Panned Chicken
Lettuce Salad Rolls
Individual Squash Pies
Cheese Coffee

Hors d'oeuvre
Chicken Pie Rolls Olives
Vegetable Salad
Cheese Wafers

Baked Apples, with Cream
Cake Coffee

Cold Boiled Ham, Sliced
Devilled Eggs Muffins

Chicken Salad
Bread-and-butter Sandwiches

Welsh Rarebit

It will be noticed that there is only one hot dish in any of these menus, which makes their service very easy in the absence of a maid. This single hot dish can be brought in from the kitchen at the beginning of the meal and kept hot, while the other elements of the feast can be arranged upon the sideboard and in the pantry.

The panned chicken of the first menu is a common dish in foreign restaurants and

is very simply cooked. A good sized fowl is cleaned and cut into convenient pieces, which are lightly peppered and salted and arranged in a casserole, or a deep earthen dish. Half a teacup of hot water or stock is added, the dish closely covered and set into a moderate oven. The time required varies with the age of the fowl, but two hours will usually suffice to make it very tender, and the flavor is admirably retained. It can be done the day before, left covered and reheated. The giblets are not used and can be saved for an entrée the next day, pieced out, if need be, with some calves' liver.

For the individual squash pies, *pâté* cases from a confectioner's can be used. Prepare a can of squash in the usual way, using only the yolks of eggs. Steam it in a buttered dish until it is set, and when it is cold fill the cases with it. Make a *meringue* from the beaten whites of the eggs used for the filling, heap on the cases and brown in the oven. Use Roquefort or Neuchatel cheese, with water thin crackers.

Radishes, olives, stalks of celery filled with a highly flavored cheese paste, tiny anchovy sandwiches, are all liked and can be arranged in some sort of a sectional dish, or else on matching plates on a tray. The vegetable salad of the second menu can be made from a can of mixed vegetables, or of boiled string beans, sliced tomatoes and sweet peppers, sprinkled with finely chopped water cress and capers, the whole arranged on a bed of lettuce leaves. For a supper, I think a mayonnaise is preferable to the French dressing commonly in use for vegetable salads. The cheese wafers are thin crackers spread with a paste of grated, *sharp* cheese and butter, set in the oven for a few minutes to harden. A good cake to serve with the baked apples, which should be cored but not peeled, is a really good gingerbread with a liberal addition of fruit, raisins and candied peel.

For the third menu, I suggest buying English muffins and, if there is an open fire in the dining room, toasting them then and there. If they must be toasted in the kitchen, serve them very hot in a covered dish. They must be split before toasting and buttered immediately and liberally. Boil eggs for devilling at least fifteen minutes. At the end of that time the

yolk is absolutely dry and can be rubbed to a paste with ease. Everyone who can make a Walsh rarebit has a pet rule, so I am not going to give any directions for that delectable dish, which is far more digestible than the timid suppose. But I will suggest that it should be made on the table in a chafing dish and that the crust of the bread for the toast should be cut off. Also that the test of a good cheese for the purpose is whether it will crumble between the fingers. Personally I am of the opinion that beer or ale is not essential, but that just as good results can be had with the use of a small quantity of milk. Many rarebits are flat and tasteless from the lack of salt, and many more would be improved by a judicious addition of butter.

Reducing the Meat Bill.

A great many of us have, in these strenuous times, to practice constant economy. Winter is not just the time in which to advocate vegetarianism, which, with many merits to its credit, is apt to result in a deficiency of animal heat. But I think we might eat a larger amount of vegetable and farinaceous food in the cold months than we do, to the advantage of both health and purse. Take that very commonplace article, a beef stew. I would suggest a process of multiplication. Use to the usual quantity of meat, twice the usual quantity of water, twice the quantity of vegetables, cook it twice as long and at half the usual temperature, and see how good it is, always provided that you know how to make it in the first instance. Suppose you are cooking pork chops or sausages, drain them out carefully and, in the drippings, fry apples, potatoes, sweet potatoes, or mashed parsnips. Substitute a dish of cheese and macaroni, two or three times a week, for the everlasting boiled potatoes. Let a bean, bean and tomato, lentil, or split pea soup appear from time to time. Do not feel that you must forego salads because it is cold weather, but use dried Lima beans, canned string beans, shaved cabbage or beets for them. If the oil seems a heavy item, explore the Italian quarter, where you will get the second pressing, the rough oil which the peasants use, which is both good and cheap. Try to have desserts which are at once palatable and of substantial nutritive value, such

as boiled fruit and suet puddings, custards and puddings with some sort of a cereal basis.

A Practical Investment.


Some poultry is expensive and goes a very little way, but a large fowl costs no more than roast beef and can be made very palatable. Get one weighing six pounds or more, and dress and stuff it as if you were going to roast it. Cook it at the slowest possible simmer, in plenty of water, until you can penetrate the flesh easily with a fork. Then rub it well with butter, dredge flour over it and brown it



Croquets of turkey dressing served with lettuce.

well in the oven, basting it from time to time with some of the pot liquor. Use more of the liquor to make the gravy and add to it the giblets, which should have been boiled at the same time as the fowl and taken out when done. The dressing should be rather more highly seasoned and have more butter in it than when a fowl is cooked in the ordinary way, but the flavor of the bird is much better than that of a small roasting chicken and there is much more meat on it in proportion.

Where a cold Sunday dinner is the rule, the fowl can be cooked on Saturday and sliced to be eaten cold, and a gravy made to be eaten with hot vegetables. Then the remainder of the liquor will supply an excellent soup and there will probably be enough of the meat left to make either a stew with dumplings or a pie. At the very least there will be enough of the odds and ends for croquettes, or for chicken turnovers, which can be supplemented with a liberal dish of spaghetti with cheese, for a dinner later in the week.



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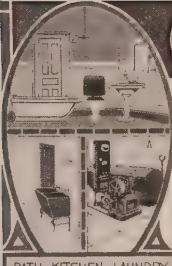
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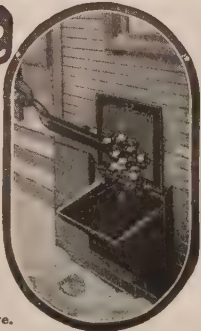
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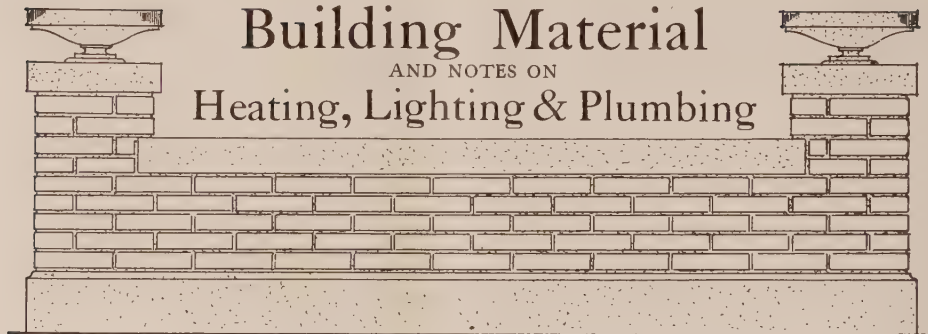
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Paint and Painting

John Upton

PAIN'T is an absolute necessity for property owners who wish to save money. It is far better to use it liberally and often than to be stingy with it. Unprotected wood-work rots, but wood that is kept well painted will last a century or more.

While paint does, of course, serve to improve the appearance of your property it is far more useful for protection than for ornament. The small amount of money and work expended in keeping your buildings well painted will add greatly to their life. The periodical investment in paints is judicious economy, because it actually costs less to use good paint than to do without it.

Wood is porous, and while the tree is growing these pores are filled with sap. As the sap dries out the pores are left empty. The perfect paint takes advantage of these pores and penetrates them while in liquid form, making when dry a tough coating on the outside anchored into the wood by numerous little tentacles which are as much a part of the outside film as the clinched nail is a part of the head which remains on the surface of the wood. To secure this hook-like hole in the wood, the paint may contain linseed oil and white lead. If some cheaper oil is used it will penetrate the pores just the same as water would do, but having no affinity for the pigment, it leaves much of the pigment on the outside or where it will scale off. Pure linseed oil mingles with the white lead in so intimate a union

that it penetrates the wood pores as an inseparable compound. When the paint dries we do not have the oil on the inside, and the paint on the outside, but a new substance both inside and out which can scarcely be separated from the wood.

Do not think, however, that the best paint consists entirely of white lead and linseed oil, or that no other ingredients are necessary, for such is not the case.

A paint is a mixture of a pigment with what is called vehicle. The pigment is a fine solid material, sometimes called the base of the paint. The vehicle is the liquid portion of the paint. There may be also inert filler, solvent, drier and color.

Base.

The materials most commonly used for the base are white lead, red lead, zinc white, and oxide of iron. White lead is by far the most widely used and ranks first for all round purposes. It has great body, spreads well, and possesses wonderful durability. Sometimes it will turn yellow when used for interior work where not exposed to sufficient light.

Because it is comparatively expensive, there is a tendency to adulterate white lead with cheaper materials, as chalk, sulphates of lead, baryta, etc. Red lead (red oxide) is used chiefly for the base of some red paints. In ordinary situations it is quite durable, dries well, spreads well, and is much cheaper than white lead.

Zinc white, or oxide of zinc, is an excellent base for paint. Some authorities con-

sider it better than white lead. It forms a denser coating than white lead and resists the action of the weather better. On the other hand, it is more expensive, more difficult to apply, dries slower, and has not the covering qualities of white lead. Pure white lead has been the standard of paint excellence and is likely to remain such, because no other pigment has natural affinity for linseed oil. The close union between the oil and pigment is required, or a bad job of painting results. Pure white lead is the only pigment having a perfect affinity for linseed oil.

Filler.

An inert filler is a material used to dilute rather than to adulterate the base of the paint; to extend it; to increase its durability; and to lessen its cost. Of course the use of the filler may be carried to extremes. Too much may be used so that instead of being a benefit it will prove an injury. The most common fillers are byrta silica, calcium carbonate, whiting, gypsum and charcoal.

It is very doubtful if pure white lead alone is the best paint. There is no white paint as durable as the darker colors, but as the bulk of the house paints now used are made by tinting a white base, the durability of the white base determines the durability of most paints.

Vehicle.

The vehicle of the paint is the material used to dissolve and hold the base in suspension. The vehicle assists in spreading the paint, enters the pores of the wood, carrying the base and pigment with it; then hardens to form the impervious, protective coating.

The best vehicle is linseed oil, and it is most commonly used in good work. Here again, we have the same thing to contend with as in white lead, because linseed oil is comparatively expensive, it is very frequently adulterated. Linseed oil dries better than any other oil, has a heavy body, and hence resists weather. It improves with age, so if you are using much paint, do not hesitate to buy oil by the barrel. Fish oil, resin oil, poppy oil and nut oils will behave in a manner similar to the linseed, and are called drying oils. They are often used to adulterate, and while sometimes permitted on a cheap job, they are not suitable for fine work.



*Woodwork—Mahogany Glaze over birch, varnished and rubbed.
Floors—White oak natural, varnished.
Walls—Mellotone ivory tint, Tiffany finish.
Ceiling—Mellotone ivory tint. (Hall seen through French door finished same way).
Furniture—Old brown mahogany.
Draperies—Browns and red-browns predominating, with olive as a neutralizer.
Rugs—Deep brown self-toned with border pattern in lighter tone of same color.
Hardware—Center light, brushed brass.
Shade on center light—Brown silk lined with cream silk.*

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Solvent.

The most commonly used solvent is turpentine, which is not as often adulterated as the other ingredients. It is used largely to thin paints, so it can be spread more evenly. Because of rapid evaporation it is not noticed in the dry film.

Dryers.

Certain substances hasten drying. Boiled oil will dry more rapidly than raw oil. Instead of using it, however, dryers are generally used. Among the dryers are litharge, zinc sulphate, manganese, and red lead. While dryers are necessary in many cases, the amount used should be small. Film produced by the use of such is not as durable as that formed by the oil.

There are long lists of coloring materials of which the mineral pigments are the best and most durable. Yellow ochre is the most extensively used coloring pigment, and is very durable. Do not buy mineral paints dry but have them ground in oil.

While there is some difference of opinion as to the amount of white lead or other base which should be used in a paint, it is generally considered that the greater the amount used the more resistant the paint film is, provided all the particles are thoroughly covered with the oil.

Do not use any paints containing compound of lead about your stables or out-buildings where fumes from decaying organic matter will darken lead paints.

Remember that turpentine and benzine are very inflammable and should be kept away from light and fire. Many of the pigments are poisonous. The workman should remove all paint stains from the skin and neither should he eat in the same clothes in which he has been painting.

For Cracks in Old Woodwork.

Another use has been found for old newspapers. They may be made into a pulp or paste which serves as a cheap and effective substitute for putty, to stop the cracks in floors and other woodwork. It is made by soaking newspapers in a paste made by boiling a pound of flour in three quarts of water until the whole mass becomes a thick pulp and then adding a teaspoonful of alum. This mixture

should be about the consistency of putty, and should be forced into the cracks with a blunt knife. It will harden as it dries, and then may be painted or stained to match the boards. If the cracks are neatly stopped, they will, after painting, be barely perceptible.

Sediment in Linseed Oil.

The following suggestion is made to the painter. Possibly it may be useful to those who use linseed oil in smaller quantities. We are told by the same authority, John Dewar, that linseed oil and turpentine are largely adulterated, principally with mineral oil and spirits.

"Don't forget when tapping a barrel of 'Pure Linseed Oil,' to draw a quantity of it into a clear white bottle and permit it to stand without handling for a day or two. If an unusual sediment settles return it at once. The sediment is largely 'foots' and will ruin your paint."

Vermont Marble.

We are told that "the greatest marble-producing industry in the world is no longer to be found in the famous Carrara district of Italy, but in Vermont, where one of the richest veins in the world stretches in an irregular line across the state. So great is the production of marble in this section that the inhabitants have lost much of their appreciation of its value, and use it for such humble and utilitarian purposes as paving, underpinning for barns, hitching posts, stepping stones, and drinking troughs for horses. This vein is about fifty-seven miles long; from 1,650 to 2,200 feet in width, and from it is being taken in enormous quantities white marble that is equal to the finest Italian marble, as well as an endless variety of blue, yellow, green and jet-black marble."

"For quarrying and furnishing the marble, the most up-to-date methods and equipment are used, no part of the work being done by hand that can possibly be done by machinery," says the Popular Mechanics Magazine. "Hand methods of drilling, still in vogue in Italy, have been entirely superseded by power-driven drills and channeling machines. The blocks as they come from the quarry are handled by derricks, and are conveyed in most cases by an inclined railway or ropeway to the mills.



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Lay-out for Grounds.

F. E.—Please give me your ideas of laying out my property and let me know what level you would use as a base line for the house, so I will know where to put my cellar; also your ideas as to location of house and sidewalks. My lot is on a corner, and the house will face west, on Harrison street. I expect to place it from 40 to 50 feet from both streets. I once was told by a landscape gardener to so place a house as to get the prettiest effect from your yard.

You will note that Harrison street is from four to six feet below grade. I want my gates to be on the street at the south side, one near each corner, and also a gate on the alley side directly out from my back porch walk. I would like to have a concrete bulkhead on Harrison street about two or three feet high, the top of which would, of course, be parallel with the sidewalk, and then pile the extra dirt in the northwest corner of the lots, which would thus make the ground quite level north and south, and perhaps have a gentle slope from the house to the west line, and of course quite a nice round terrace at the bulkhead.

Ans.—Your lot is not an easy one on which to build, on account of the street grades to the south. The foundation must be placed so that water will not run into the basement from the southeast corner, but otherwise must be as low as possible on account of the fill involved on other sides. The location designated is a good one, and the grade of the front part of the house will be much higher than street grade at the southwest corner of the lot and lower than the southeast corner. You will, of course, make a little valley between the house and the southeast corner, and grade the rest of the lot in large, sweeping convex curves starting with the house and stopping with the property line. Because of the irregularity, it is essential to grade so that the lines are natural like a hill rather than artificial like a terrace. For this reason the change in grade at the foundation from front to back should be inconspicuous and rounding and not at all like a formal terrace.

The sidewalk lines should likewise conform with the naturalness of the grade lines. The front walk would best be something like an "S," starting straight in front of the entrance steps and terminating in some steps coming up the southwest corner of the property. They would properly be five feet wide. The back walk being only a service walk, can as well be narrow and come in straight to the back steps at right angles to the street.

To complete such a careful arrangement as you evidently intend to make, some considerable tree and shrubbery planting is needed about the house and near the property lines in the same natural manner as the other lines of the lay-out. The planting plans published recently in this magazine will show the general method.



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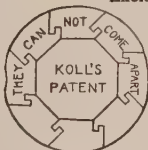
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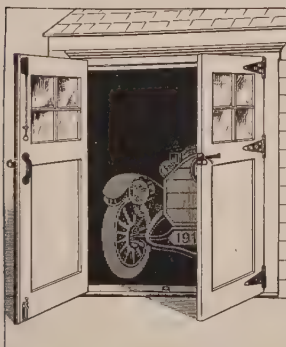
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WOODS

AND

HOW TO USE THEM



EDITOR'S NOTE.—When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH'S staff of wood experts.

This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

An Educational Propaganda.

THE Forest Products Federation have organized a new department of trade extension, which will undertake an educational propaganda on the use of wood, the field which it should fill to the greatest economic advantage to all those concerned, and the status of wood under the pressure of modern competition and selling methods. Education in the broadest sense is the keynote, and by no interpretation is simply a national advertising campaign proposed.

The initial lines of work will cover building codes and ordinances relating to the use of wood in building and its limitations.

Investigation as to the relation of wood construction and shingle roofs to the fire hazard will be conducted and publicity given to the findings. Fire retardant materials and processes will also be investigated. This important work will be undertaken in the spirit of safeguarding public welfare and protecting human lives and property.

The engineering bulletins will be planned so as to be embodied in a Manual of Standard Wood Construction.

Publicity on the uses and advantages of wood will be given by literature, magazine articles, lectures and all other available mediums.

Popular leaflets will be prepared for distribution through many channels, covering specifications and suggestions for many farm structures.

Wood preservation and its application to the lumber industry will be exploited and literature prepared on the subject.

Co-operation with several organizations such as the National Paint Association, United Brotherhood of Carpenters and Joiners, American Wood Preservers' Association, will be arranged to the end of promoting mutual interests in the use of wood.

The Increasing Uses of a Very Old Wood.

The expositions of California are bringing to the attention of the people of the country the qualifications to which California redwood lays claim and which, they say, have been little known outside of the Pacific coast territory. Redwood has been used largely for general building purposes, on account of its great durability and light weight, and for mill work because of its comparative freedom from swelling and shrinking with atmospheric changes. Its possibilities as an interior finish have not been developed. The California Redwood Association predicts that, with the recent completion of direct rail connection, this lumber will soon become one of the most important of building woods.

The following statements have been made concerning its use in early California building:

"The imperviousness of redwood to decay has long been known, and therefore its use by the home builder for foundations is not only natural but advantageous.



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Homes in Humboldt and Mendocino counties were built on redwood foundations as long as fifty years ago, and the original sills are at the present day as sound as when first laid down.

The weather resisting qualities of redwood, even when unpainted, are proverbial. Barns erected in Humboldt and Mendocino counties as early as 1855 were sided with unpainted redwood boards and covered with redwood shingles and shakes, none of which today show the slightest deterioration from exposure. The Russian church, erected at Fort Ross, California, in 1811, was built entirely of hewn redwood, and although the building itself was completely wrecked by the earthquake in 1906, the redwood itself is as sound today as when the trees from which it was hewn were felled.

The fire resisting qualities of redwood are well known, and no forest fire, no matter how severe, has ever destroyed a redwood forest or killed a sound mature redwood tree. In the great San Francisco fire of 1906, this characteristic was put to a most severe test.

The *Sequoia Sempervirens*, as the redwood is technically called, is found only along the fog belt of the California coast, extending in a strip from ten to thirty-five miles wide from the Oregon line on the north down into Marin county, with a few scattered groves of small commercial importance as far south as Monterey."

Trees Oldest Living Things in World.

Recently the government has issued a bulletin on the giant trees of the Sequoia national park of California. There are 1,166,000 of these great trees, the oldest of which is 3,200 years of age, the tallest 292 feet high, the greatest diameter 36.5 feet. The greatest diameter 100 feet above the ground, 17.7 feet. These trees are the

oldest living things in the world.

In the days of the Trojan war and the exodus of the Hebrews from Egypt, the oldest of the giant sequoias was a sapling twenty to thirty feet in height, and by the time of the Marathon was mature.

The redwood tree grows to a height of 150 to 300 feet with a diameter from three to fifteen and even twenty feet at the base. The trees grow very close together and will average from 75,000 to 100,000 board feet to the acre. The record yield per acre is 1,000,000 board feet.

Eucalyptus, the Wonder Tree.

California growers of the eucalyptus tree met in convention in the Lumbermen's building at the Panama-Pacific exposition. The tourist-visitor to California is surprised at the number and extent of the young eucalyptus groves which he sees on every side along the ways of travel. They call the eucalyptus the "wonder tree" because, as they say, it grows ten times as fast as hickory, oak or mahogany and yields lumber which is harder and better than those native trees.

Oregon Timbers.

The great industry of the state of Oregon is displayed in a unique way at the San Francisco exposition by the State building. It seems to be composed entirely of mammoth tree trunks. The wide porticoes that surround the building are supported by forty-eight majestic columns representing the forty-eight states of the Union. These columns are simply mammoth trunks of the Douglas fir, with the bark left on, from the forests of Oregon. They are from four and one-half to eight feet in diameter.

Each of these columns contains enough lumber to build a good-sized dwelling house; they weigh from forty thousand to fifty thousand pounds.

The flagpole for the building is the tallest in the world—251 feet high. It was hewn from a tree 347 feet high, and weighs 93,600 pounds. There are more than thirty thousand feet of lumber—enough to frame and board in five eight-room houses—in this giant flagpole. The tree was more than three hundred years old, and it cost over five thousand dollars to transport it and set it in place.

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Living and Dining Rooms—Dutch Brown, flat or glossy finish.

Halls—Same as living room, if opening from the latter.

Stairs—French Gray enamel risers, ballusters and base, natural finish treads, mahogany banisters.

Library—Early English, dull finish.

Kitchen—Natural finish.

Bath—White or French Gray enamel.

Bedrooms—Clean, cool, inviting Silver Gray, mahogany window stools.

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SPLINTERS AND SHAVINGS

Seven Lean Years.



HE dream of Pharaoh which Joseph interpreted pictured seven fat years following seven lean ones. It is a curious enough fact, but modern statistics show, we are told, that the business tide ebbs and flows in approximately seven-year periods. Since 1907 the tide has been on the ebb, according to this statement and today there can be little question but that the tide has turned.

For the first half of the year 1915 a foreign trade balance of stupendous figures has been amassed and is still increasing. This trade balance has been built up not alone from the necessities of war but also by the needs of the home.

The principal factor contributing to this result, we are told, was not munitions of war, which might seem to give us a responsibility in this terrible slaughter, so much as foodstuffs, the exportation of which for eleven months amounted to nearly three-quarters of a billion of dollars. Of this, wheat constituted the largest item of increase over the previous twelve months, followed by flour, beef and other meats.

In this country the demand for labor and for the product of labor is becoming stronger, while capital created by economy is awaiting the inevitable demand for its legitimate use. Prosperity seems to beckon from the distant horizon.

Our Trade Balance.

"We all bow down before, and bump the head hard three times in the presence of, that mighty and mysterious fetish, The Trade Balance. Whether we discuss industry, commerce, finance or the tariff in a nation-wide sense, we do not overlook the masterful relation of The Trade Balance thereto, nor forget to beseech his statistical favor in order to give point and emphasis to argument. It is true some economists have jeered at The Trade Balance and called him a Stuffed Prophet.

"So we ought to be very happy over

here on this side of the Atlantic. We have assured ourselves time and again of the potency and goodness of The Trade Balance. And now that we have it, in amount to exceed all the dreams of avarice, what are we going to do with it?

"The inner economic meaning of this windfall of war we are not able to establish at this time. The United States as a whole is a great deal richer in both money and credit than it was a year ago.

"We are saving a good deal of money in our relations with Europe on other than trade scores, notably in the expenses of travelers and tourists—the latter of whom are princely spenders."

Beauty as an Economic Asset.

"We are coming into a fuller and clearer realization of beauty as an economic asset," the Minnesota State Art Commission tells us. "The industrial arts of France or the handicrafts as we have come to think of them, exceeded in their economic value in one year the total valuation of the American wheat crop."

The Annual Cost of a Rat.

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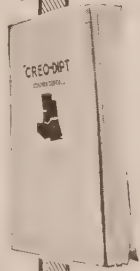
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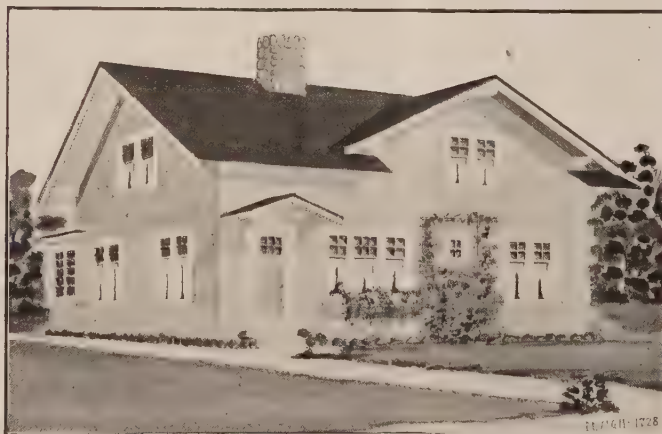
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New Booklets and Trade Notes



HE White Pine Series of Architectural Monographs is a most unusual publication of its kind. It is a "bi-monthly" publication suggesting the architectural uses of white pine and its availability to-day as a structural wood," issued by the White Pine Bureau, St. Paul, Minn. The second number has just been issued, and illustrates the development of Colonial building in New England during the early portion of the 18th century, showing many fine old houses from Medford, Marblehead, Cambridge, etc. The text is prepared by Frank Chouteau Brown, whose name alone stands for something of interest concerning Colonial work.

The first number described the very beginning of domestic architecture in this country. The third issue will discuss the domestic architecture which was developed by the Dutch in their colony of New Netherlands. Mr. Aymar Embury II will contribute the text.

These houses, which have stood much more than the length of time which people of other sections of the country consider the normal life of a wooden structure, are many of them still in an excellent state of preservation, and are fine old houses. A further and more de-

tailed knowledge of them will be not only of interest, but very helpful to the builders of the present time.

* * *

A little book on "American Plaster Board,—The Modern Lathing," purposes to inform architects, contractors, building material dealers, and people expecting to build homes or other buildings of the merits, value and proper uses of this plaster board. It separates itself entirely from other so-called plaster boards, because it does not take the place of plaster, but makes a base for the plaster which does not shrink, warp, nor discolor the plaster, and which is at the same time vermin proof, sound proof, water proof, a non-conductor of heat, and comparatively fire-proof or at least non-inflammable. It may be used for floors and ceilings as well as for walls, and is especially valuable as deadening the sound as well as fire retardant. It is manufactured by the American Cement Plaster Company at Lawrence, Kansas.

* * *

The first copy of "Construction," the official organ of Society Advocating Fire Elimination, with a department devoted to S. A. F. E. homes, has been issued. It will discuss in detail the consistent planning and building of all structures where the consistent use of fire-proof materials and protective devices will prove of direct value to owner, architect and builder. People have allowed themselves to feel that insurance protects against fire.

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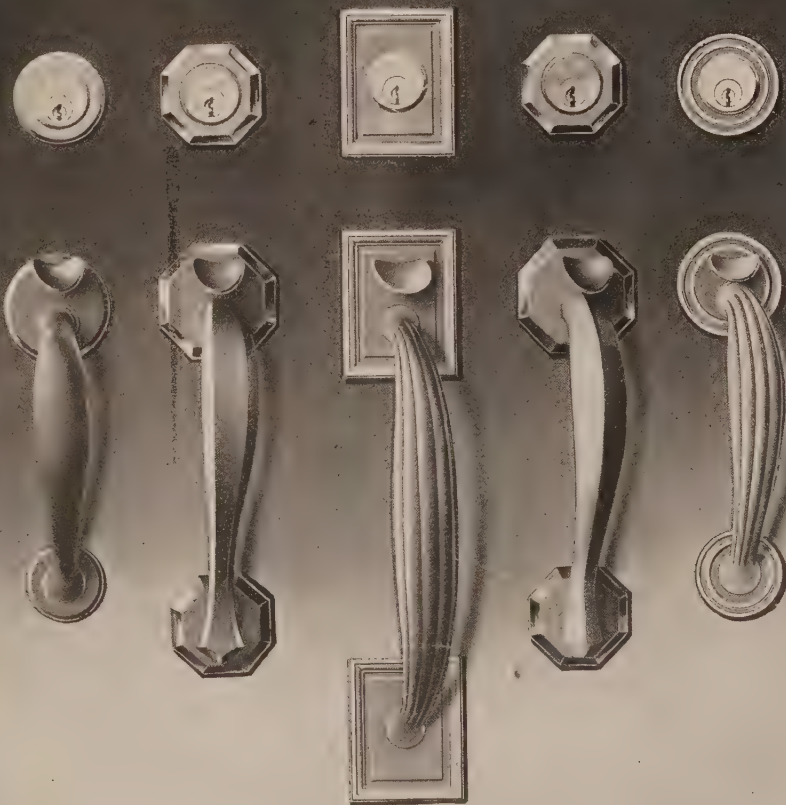
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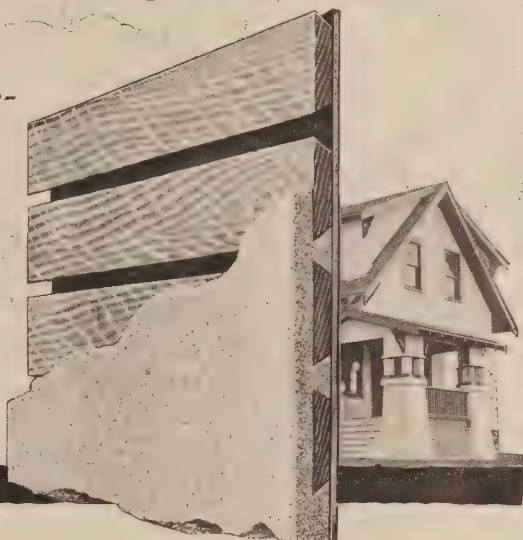
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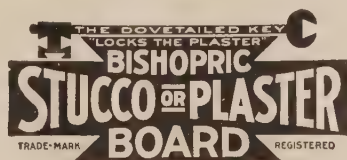
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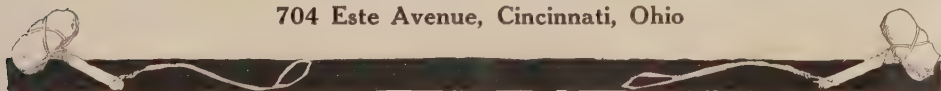
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(Continued on Page 365.)



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(Continued from Page 362)

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Just a Word

Business Is the Art of Human Service.



HERE is much building which is waiting only the final word of the owner, the capitalist, to set in motion all of the busy wheels of the industrial world. The work of the world is lagging. The people must be fed, on charity if their normal work is not forthcoming. Capital has no right to retire into safety and shut off their supply of honest labor. The harvests have been bountiful, there is plenty in this land. When business can shoulder its responsibilities, which under normal conditions it would take without a pause, it will banish fear,—the psychological phase of this period,—and do the work upon which the vital life of this warring world depends.

As we reach the Christmas tide and the beginning of a new year, we are not being just to ourselves nor to our neighbors if we do not take a broad view of our opportunities, our responsibilities, call them what you will.

"Business today is the art of human service." With the development of this thought have business men grown and the prestige of business developed. The successful business man has become the counsellor of rulers. In a grave crisis the great financier is called to the council. The country looks to him for guidance and help and is not disappointed. In all the wonderful changes of the last century, none are greater than the attitude of man toward man. The old time scorn of "trade" is gone and with it the tradesman who made his boasts of over-reaching his customers. There is graft, as there may always be, but it wears a different cloak, cut after the fashion of the times, in its offer and promise of service.

When the railway magnate propounded as his motto, "Let the public be pleased," he marked the turn of the tide. The economic theory that "Competition is the life of trade" is passing with it. The thought which has been creeping into the lives of men everywhere, that co-operation is better than competition, is not altogether altruistic. With it is the thought that in giving much we will also receive much. It comes with almost a sense of shock that business may accept the Bible mandate. Yet a big business is freely giving what has not been demanded of it, and finds an economic return.

The business world accepts the proposition that what is good for one is good for another; that, in an exchange what is one man's gain is not another's loss; that the whole business world is so indissolubly bound together that a loss or disadvantage to any part has a baleful effect on the whole business structure; and that good work anywhere adds to the general good. The home-builder is a producer and adds directly to the assets of the community.

KEITH'S MAGAZINE

ON HOME BUILDING

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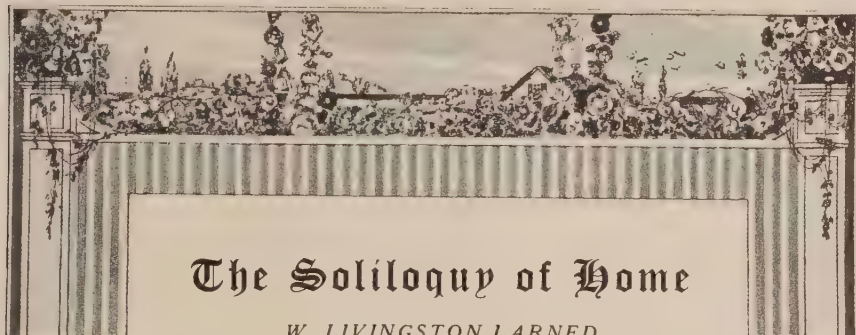
"Within my portals."

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The Soliloquy of Home

W. LIVINGSTON LARNED

THE last nail has been driven.
The last brush-mark is dry, and the last remnant of the restless Artisan has been cleared away. I stand, complete, ready for your occupancy. I am no longer mere wood and plaster and brick and metal and craftsmanship. I am HOME, in the sweet fullness of the wonderful word.

It has taken Self-sacrifice to build me. Years have passed, monotonously, perhaps, and the heart has hungered for my peace and quiet, but now . . . now . . . Man and Woman, your Nest is complete. The blue sky smiles gently above it and here, in all the broad reaches of God's wonderland, is one tiny patch you may call YOUR OWN. It was WORTH the waiting and the heart-aches and the delay. Man . . . light your pipe and don your smoking jacket . . . there is your table and your evening lamp and your dreams. And you, Woman, we would have you sing in your tidy kitchen and plan such magic ideals as never were born short of Paradise.

My snug ramparts will do much to ward off the unhappiness of the big, outer World. Indeed, if you but know it, Man and Woman, I am a WORLD UNTO MYSELF, complete, beautiful, soul-satisfying. And when You, Man, are wearied of the office and the bustling town, and when Business shall have buffeted you beyond endurance, you may turn your eyes MY way, sure of rest and release. Yes . . . I am the antidote for the Hurts of the Commercial Highway. I open my doors to you, who have been rebuffed and beaten and cowed and hammered down to the dust by Life's long struggle for existence. An unassuming



little Convent amidst roses and green lawns, for Woman, sick of Battle with Stern Reality. Here, sure of herself, Mistress of all she surveys, she is privileged to draw the blinds, and close the portals, bolting herself in from that which humiliated. A Princess, mayhap, in a Castle of Content. From the battlements, she shall peer outward, upon the panorama of the nervous Day, and see it pass, touching her not . . . leaving her happily wedded to her lullabies.

Yes, I represent one of the purest and most Holy ideals Man or Woman may hide in their heart of hearts. "HOME" . . . the word itself was first whispered in Heaven, and then sent wondrously echoing by the angels. Love dwells within my walls . . . God, Himself, smiles in at the sunny casement, and mixed with Hopes and Ambitions and spiritual dreams is the laughter

of little children. I am incomplete without CHILDHOOD. The rooms seem lonely indeed, for all their life if babies be not there, to coo and to cry and to crawl joyously along the golden path of the sun as it shines there on the sitting room floor. A chalice 'O Maternal Affection am I, smothered in jasmine and tea roses.

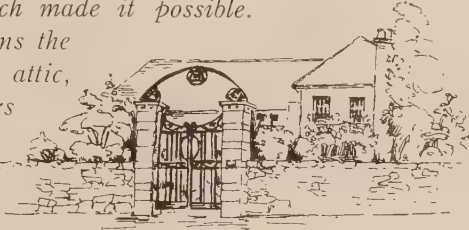
During those solicitous days when hammers pounded upon me, and the scent of white pine and paint and tar and lime were in the air, you came to the top of the hill, arm in arm, you two, and stood at quite a distance, looking at me, in silence, as if a word might dispel me into Nothingness again. It was difficult to believe that I was being created . . . that, from the Toil and the Waiting, Material Reward had sprung and was taking pretty shape. And the days passed . . . the grass flung its green fabric over the scarred earth, the clambering vines grew strong and luxuriant . . . the roses SHE had planted took firm root and buds came with Spring-tide . . . a magic mosaic of Beauty welded together by June.

Come, bide with me. As birds build nests in high trees and raise their young, you two, Man and Wife, are to climb the long hill and plan for a new sort of future—a future in which little hands and little lips and little voices are destined to play wise part. I'm waiting for

you. As sweet and as clean as the very flowers at my door. No unkind word has been said within my portals—no sufferings have been known . . . not so much as a tear has fallen on my sparkling threshold. Take me and see well to it that I be kept still sacred. Sweethearts must lodge here . . . sweethearts until the twilight of your companionship . . . my rooms long for those honied, inconsequential, bird-like things men say to women and women say to men, when their Love is as Holy as the Bond which made it possible.

There is a porch, up whose white columns the honeysuckle clammers, . . . there is an attic, where cob-webs will be spun from dark rafters and where old love letters will some day rest in a horse-hair trunk . . . there are closets, just right for toys . . . there is a cool, long hall and a pretty little dining room, at whose windows dainty white curtains will ripple in the wind and geraniums burn orange and red, as if painted . . . there is a pink and white bed-room, overlooking meadows and hills and dream-things, lying far below in the afternoon sun . . . there is a room set apart for books and leather covers and magazines and consecrated, we confess, to the mystic, oriental fumes of tobacco smoke . . . there is a certain corner . . . yes, a certain quiet, sunlit corner where a crib should stand, with room beside it for a rocking chair and one of those tall, sedate sewing-baskets of cream willow. There is a cellar-way, rife with poetic mystery and shelved for those delicious jams and jellies My-Lady will make—there is . . .

But No . . . I will say no more. Come . . . I am waiting impatiently for you both . . . MY Children . . . my Lodgers of the Long Sacrifice . . . When the last stroke of hammer and brush had been given there remained but ONE more thing to make me truly habitable . . . God's Benediction . . . and last night . . . as the world slept, the dews and the summer rains fell, singing their way along the roof, and Dawn gave golden assurance that HE had given it.



The Secret

On a bed of moss the violet lies
And o'er the violet sway the ferns:
Above the ferns the birches rise
Above the birches glow far skies
And God o'er all with fond heart years.

—Evelyn M. Watson

A Real Estate Investment on Two Forty-foot Lots

Nellie Ward Haller



HE question is often asked, what can a woman do for herself when she has only a small capital and no especial business training?

What can she do with a small capital in California to make her self-supporting? Here is the story of what one woman did. There were really two women,—a story always requires two people. In this case the daughter soon married, so she does not count in this story.

This clever woman went to California to live in God's sunshine and to enjoy the fruits of the earth and the blessings of health. No one need spend her days in a country that is ice-bound half the year and tradition-bound all the time, when the sunny land of California beck-

ons to her, and offers her a home.

She invested the bit of gold she had brought with her from the cold country in two forty-foot lots on a corner in a new suburb almost an hour by trolley from the heart of the city. It was one of the most beautiful spots imaginable, so the clever woman thought, almost overlooking the Arroyo Secco yet not quite near enough to acquire Arroyo prices, which were very high even then. There was a small house on the lots. She built her home, on the corner, and a small house beside it with the rest of her small hoard.

Her friends gave her good advice; it was too far out; the suburb was too new for good rentals; it was not practicable to build so good a house; how could she



The "Big House."

ever dare to build the second house. But the clever woman kept the even tenor of her way. She rented the big house easily. Then for a time she rented the second house, furnished, and lived elsewhere. She soon furnished all of the houses. Each had its little garden spot both for vegetables and flowers, for the lots were 150 feet deep. House Number One, which she intended for her home, was a Keith design and built about ten years ago; the original cost was about \$2,000. It rented immediately for from \$25 to \$30 a month. It is a seven-room, story-and-a-half bungalow. The four bed rooms upstairs are not large,

is 10x17 feet. The entire floor space is 26x44 feet. This house is certainly a very pleasant place in which to live. The living rooms connect by generous openings and the floor space is so compact as to make housekeeping easy.

The interior finish is slash grain Oregon pine, stained black; the floors are of



The landing in a semi-circular bay.



The corner fireplace of the little house.

but each has windows on two sides, a magnificent view as well as light and sunshine, and are very satisfactory. The bath room, 6'x9', is of good size. The living room is all that the words imply and makes up for any deficiency which the rest of the house may have. It is 15x25 feet and well lighted. The dining room is 15x17 feet with a built-in buffet. A semi-circular bay gives a most unusual and attractive stair landing. The kitchen

the same kind of wood polished; the walls are Alpine plaster "rag finished" and tinted brown with cream-colored ceilings. The exterior of the house is most attractive, with the semi-circular stair bay on one side and the exposed chimney on the other side of the house. Front and back porches six feet

wide are under the main roof.

The second house sets to the west of the main house. It is an ordinary five-roomed cottage, with bath and the usual screened porch in the rear, and a pergola over the entrance. This same plan has probably been built hundreds of times in Los Angeles and was very much in demand some years ago when this house was built. There is nothing unusual about the plan or the house. The floor

space is 25x40 feet. The living room is 12x18 feet, the dining room 12 x 15 feet. The interior finish is Oregon pine, and the floors are painted a dark red; the walls are tinted ecru through out.

The house has always rented well, bringing \$20 or \$25 when it was furnished. It has been built about eleven years, and the original cost was \$1,300. The Lady Banksia rose, a climber, on the pergola adds quite a little beauty to the front entrance.

As a matter of investment, the clever woman found that the third tiny house, facing east, which was really the first one built, had been quite as satisfactory as the others. The depth of the lots allowed a lot 40x80 feet to be taken off beside the alley, leaving the front lots 40x110 feet. The 20-foot alley, clean and well kept as it always has been, was really a narrow street.

This house is almost all windows. It has a floor space of 20x44 feet and contains four fairly good sized rooms, a bath room 6x9 feet and a sleeping porch 6 feet wide across the entire back of the house. The peculiar shape of the house and the fancy shingled exterior have caused the



Climbing roses give a touch of beauty.

people in the neighborhood to dub it "The Bird Cage." It has been built over fourteen years and has only been vacant for a week or so at a time, owing to the energy and foresight of the clever woman. The

woodwork throughout is Oregon pine painted white, the floors also Oregon pine painted. The walls are rough plaster tinted ecru, with cream ceilings. The furnishings are golden oak and the draperies at the windows yellow dotted swiss. Asparagus fern, red geraniums, crepe myrtle and roses are banked about the house. The garden has a variety of fruits. The house probably did not cost



"The bird cage."

over \$1,000, and has averaged a rental of \$20 per month, so as an investment it has paid for itself.

The "estate," viz., the two forty-foot lots, has become a veritable rental proposition with a fair return. The houses facing snow-capped "Old Baldy" are attractive, compact, livable,—particular care has been taken that they should be all of these.

After a few strenuous years this clever woman came into her own again, and made her home in the "big house."

Planning the Fireside Corner

Charles Alma Byers



ALTHOUGH nearly all of our homes of today are equipped with furnaces, so that the house may be evenly heated throughout, the fireside corner, on the winter evening, is without doubt the most popular place in the home. It is here that the family invariably assembles to read and to talk over the events of the day, and it is here also that evening callers are most often entertained. And it is the household resort not only for the evenings of the winter months but of the fall and spring months as well for on such occasions a fire on the hearth will often prove alone sufficient.

Therefore, to make this place suitably inviting, the fireside corner should receive careful consideration.

The fireplace itself should receive first attention. It must be properly designed, so that it may prove of practical service, and it should also be so designed as to constitute an enhancing feature of the interior. The ordinary builder of today, however, is invariably thoroughly familiar with the rules governing practicable fireplace construction, so that this phase of the matter may be passed over without further comment—so long as he is made

to realize that these rules are of paramount importance.

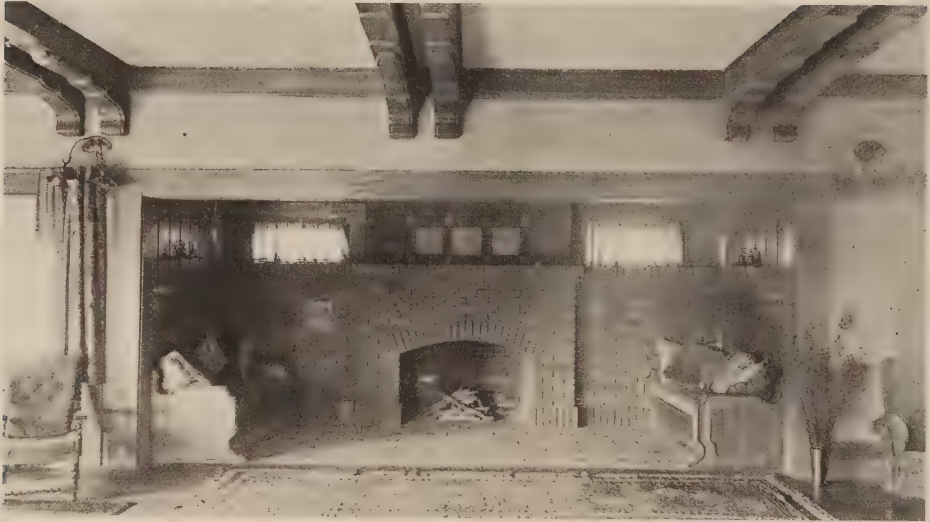
To make it suitably decorative, the fireplace should be made to harmonize as much as possible with the general appearance of the room in which it is used. If the room be of simple and dignified character, the fireplace naturally should be in keeping therewith; if the interior lean toward rusticity, this effect should be likewise maintained in the fireplace, and so on. In other words, the feature, in neither design nor color scheme, should be too conspicuous, nor in any way seem to have been added as an afterthought. It is by a proper consideration of these matters of proportion that the truly attractive fireplace is evolved.



Brick and tile give a wide range of color.

To create the desired effect, there are any number of materials from which a selection may be made. Brick and tile are always obtainable in a wide assortment of colors and finishes, and from them it is possible to produce almost any scheme that may be wanted. Artificial stone, or concrete blocks, is also frequently employed with good result, and even cobblestones are sometimes highly satisfactory, if properly handled.

Generally speak-

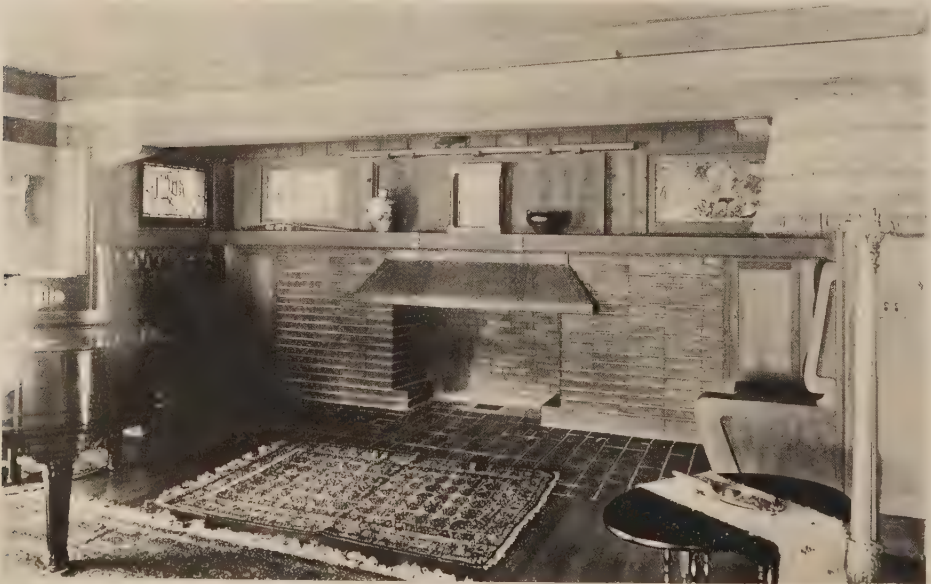


The brick hearth is the width of the seats.

ing, the fireplace should be of simple lines. This is again an age of architectural simplicity, and rarely will any show of the ornate seem to comprise a display of really good taste. This applies to the construction of the fireplace as a whole,

as well as to the mantel or mantel-shelf alone. A fireplace may be pardonably made prominent by massiveness, but rarely, or never, conspicuous by ornamentation.

An inviting fireside corner is, of course,



A copper hood gives a good touch of color.

dependent mainly upon a satisfactory fireplace. There are, however, several other matters that may be considered in connection therewith. For instance, a built-in bookcase or two will often enhance the appearance of the corner, as well as prove delightfully convenient. Sometimes, also, a built-in writing desk is considered a desirable asset. Stationary, or built-in, seats are very frequently, nowadays, made a feature of such a corner, and by referring to the accompanying illustrations it will be realized that they are highly effective in making these cozy corners indeed inviting.

When the fireplace occupies the center of some outside wall, a very common arrangement consists of placing a bookcase at each side of it. Usually the cases are rather low—perhaps extending from the floor to a height of four or five feet—and in this way the tops are made to provide charming shelves for pictures and bric-a-brac, while above will probably be located a tiny window or two. Whether the fireplace be in the living room, den or library, this arrangement is particularly handy, and will be found to add greatly to the appearance of the room. In some cases, however, a small built-in writing desk is substituted for one of the bookcases.

There are several different ways for arranging seats for corners of this kind. These seats may be placed against the wall at either side of the fireplace, being used instead of the bookcases, or, if the

room be sufficiently narrow, they may be located along the side walls of this end of the room. This, in fact, since the seats more nearly face the open fire, is an especially desirable arrangement. And sometimes, in such cases, a low bookcase may be built out into the room at the outer end of each of these seats, so as to shut off the fireplace into a sort of alcove. This, too, is a very delightful plan, and the fireside corner of this kind is sure to constitute an ideally cozy retreat. This, of



The fireside corner is a cozy retreat.

course, is rarely adopted in anything but the living room, since the other rooms are seldom large enough to permit such a division.

In designing a fireside corner to contain built-in seats, it should be borne in mind that the seats can be made to serve for other purposes than those for which ordinarily created. Beneath the seat-shelf, if this seat-shelf be fastened with hinges, may be provided an excellent fuel bin or a storage place; and sometimes this space is even equipped with drawers,



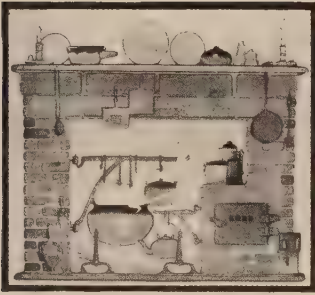
The round arch of the fireplace opening is unusual.

which may be drawn out from along the front, and hence without interfering with the seat cushions and pillows.

These attractive fireside corners may give suggestions of practical value to the prospective builder.



A simple fireplace and seat.



THE KITCHEN



A Complete Kitchen Without Unusual Expense

Edith M. Jones

(Copyright, 1915, by Edith M. Jones)



THE kind of houses we live in greatly influence our lives. Not alone is our comfort affected but our housing has much to do with our efficiency. A cold, dark house is not only less comfortable than a warm, sunshiny one, but the care of a badly planned house requires a great waste of time and energy.

Many otherwise knotty household problems find a solution when housed with ample, well planned closet and storage room, good laundry equipment and drying space, a convenient and well equipped bath room and above all a kitchen which provides well chosen and carefully placed furnishings.

The kitchen is without doubt the most important of all because it is the great industrial center of the house. As someone, either the mistress herself or an assistant, must spend two-thirds of her time in this room—it is obvious this part of the house should

be not only convenient but attractive.

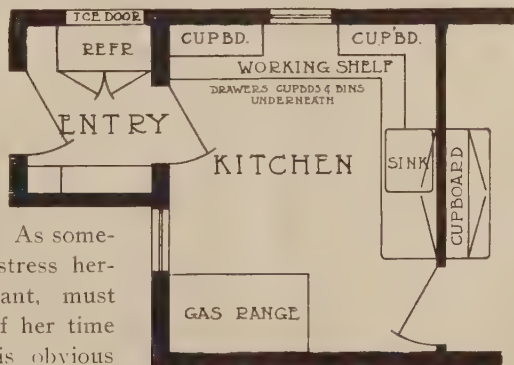
It is a great mistake, however, to think that a convenient kitchen means an unnecessary outlay of money. Not so at all,—for some of the most expensively equipped kitchens I have ever seen have been the most inefficient. On the other hand some very simple kitchens have been models of convenience.

A successful kitchen does not demand expensive equipment so much as intelligent, careful planning for the individual family needs.

A mistake in the kitchen is especially serious because changes mean either much additional cost or else there must be

many needless steps, useless effort, waste of time and constant annoyance.

The kitchen floor plan which is shown is one of the very simplest types of the so-called efficient models. It has proven itself a blessing in a



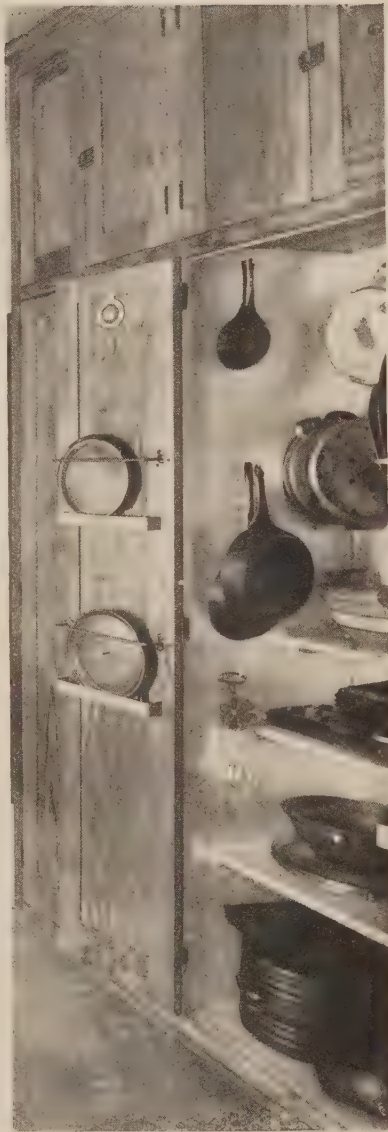
A complete small kitchen.

home where the mistress does all her own work, with the exception of the laundry work. This housewife is a woman of many outside interests and constantly says she could never do what she does without her complete little kitchen.

There is not one unusual expense in this kitchen, nor is there one useless step or motion.

This kitchen is small — the inside measurements are 8 feet by 10. The small entry is 4 by 5 feet. This entry in this northern climate is not alone a great protection from the cold and snow but it keeps much dirt out of the workshop and altogether is quite worth the added expense.

In so small a kitchen it saves much wall space to install the refrigerator, as we did this one, in this entry. The icing is done from the outside and the box is provided with drainage. To avoid the stooping process involved each time one goes to the food chambers the box was set one and one-half feet from the floor. This space was made into a cupboard and is used for the scrub pail, etc. This elevated refrigerator solves the same problem that the modern gas range



The pan closet.

has done in its right and left hand ovens. Women hate stooping and it is one of the things to be avoided as far as possible.

A small receiving window with automatic locks, not shown in this drawing, opens on an inside shelf beside the rear door. This window is used to receive the deliveries and saves many unnecessary trips to answer the door bell.

To the left of the entry door is the broom closet in which a place is provided for two table boards. As they are rarely used the remaining boards are sent to the attic.

The remaining space at left of entry is used for the pan closet. The illustration makes its use and convenience quite apparent and a description unnecessary.

The gas range shown is small in size but one that is very satisfactory for a small family. It has a right hand oven, white enamel splash-back and white door panels.

The window beside the gas range serves for direct light on the range work and also provides the counter ventilation. Beneath the window is a drop shelf which can be used when occasion demands.

The working shelf at the other side of the room is thirty-six inches from the floor. It is made of inch strips of white maple $1\frac{3}{4}$ inches thick, bolted together, so that the bolts can be tightened. This has proved a most satisfactory working shelf. Beneath the shelf are the *movable metal lined* flour and sugar bins, bread and cake drawers and a storage cupboard.

The one piece porcelain sink is the same height as the working shelf and continues from the end of working shelf to a few inches of dining room swing door. This door, by the way, is provided with one of the new and very useful door stops. The sink has a drain stopper which is a great convenience in washing dishes and preparing vegetables. A drawer with partitions for working knives, spoons, etc., is under the left drain board. Under this drawer is the low radiator. Under the right hand drain board is a chest of drawers for the roller and tea towels, the silver cleaning outfit, etc.

The cupboard above the working shelf at the extreme left is for the spices, etc. The other cupboards in kitchen are for the dishes. The doors of all these cupboards are of glass but the overhead cupboards have wooden doors as these are only used for storage.

The doors above the sink open into a cupboard above the buffet in the dining room. The utility of this arrangement cannot be questioned. The used dishes from dining room table are put in the cupboard from dining room side and are taken from kitchen side and washed.

After draining and drying they are placed in the cupboard again ready for the next meal.

This simple arrangement not alone saves much handling but also much breakage of dishes. The doors must be carefully fitted, however, and care used in keeping them closed during the cooking of the meals in order to prevent odors from penetrating into house.



A range extension with table of maple strips bolted together.

This little kitchen is not alone a very efficient kitchen but a most attractive one in appearance. The floor is covered with linoleum in a Copenhagen blue and cream and has a coved base. This coved base fits up under the bins also and does away with all angles and corners. The side walls are covered with a creamy-white Sanitas which has a conventional design in Copenhagen blue with a touch of deep red.

The woodwork of the kitchen is enamel the color of Jersey cream. The entry is done in the natural color to match the outside finish of the refrigerator.

The windows have thin white sash curtains. Above the curtain rod on the windows is a little shelf and here are always seen one or more red geraniums.

Some way this last little bit of color seems to be the crowning touch to this attractive room.

If it is true that the houses we live in greatly influence our lives—can we not as truly say a well planned attractive work-

shop, like the one described, must not alone affect our comfort and efficiency but the worker's added joy and interest in her work must have a far reaching effect on the health and happiness of the whole family?

The Fascination of the Rug from the Orient



HE charm of the Oriental rug is elusive. The some-time householder often buys his first "Oriental" as he would a picture or a valuable book "just because he wants it." He may have no use for it nor any place to put it. The mystery of the Orient, the wonder of color and texture pervades the rug. There is an unknown quality in the design; which has been the only means of self-expression to generations of workers following the same patterns, beside which our studied designs seem lifeless if not crude. It

weaves a spell over the imagination which is almost irresistible.

The practical American listens to all that is said about the fascination and the beauty of the Oriental rug, and then asks wherein its actual value lies, and how it differs from the weaves of the West. In the first place the carpet is essentially an Oriental product. When civilization in the West was living on sanded and rush-strewn floors, the Oriental potentate had his wonderful rugs. Ancient gossip tells us that the tomb of Cyrus was covered with a Babylonian carpet, and that Cleo-



A woman's whole life goes into these rugs.

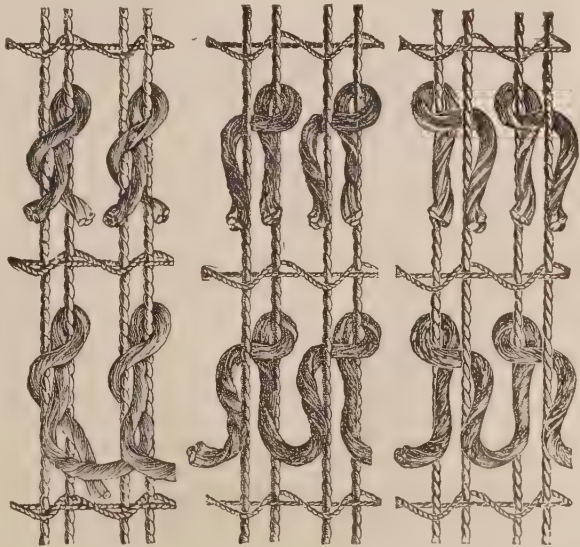
patra was carried into the presence of Caesar in a roll of carpet.

"Next to the quality of the material from which it is made and the dye with which it is colored, the splendid durability of the Oriental rug is due to the manner in which the pile is tied to the warp thread. So securely is it tied that it is impossible to remove it by pulling either end of the knot. This differs from the domestic method in which the pile is merely drawn between the warp threads without tying or fastening. In the finer fabrics of the East the knots are so close that it requires careful examination to discover them, except in very old rugs where the pile is worn down, when the knot is distinctly seen."

The knot is the unit in the Oriental rug. The tiny stipend paid to the worker depends on the number of knots she ties. The pattern is counted out by the number of knots in each color. The fineness and the value of a rug, as with a cashmere shawl, is measured by the number of knots to the square inch. In some parts of Persia the best weavers are men, but in general Oriental rugs are the work of women and children. Little tots begin working at the loom when only four or five years old, we are told. A woman's whole life goes into these rugs. A skilful weaver can tie from twelve to fourteen knots a minute,—from seven to eight thousand knots a day.

The eastern loom is primitive. It consists merely of four poles joined together with ropes according to the size of the rug to be woven. On these the warp threads are strung and kept at the proper tension by weights, which are attached to one of the cross poles. "Beginning at

the bottom and working toward the right, the wool yarn, which is to form the pile, is looped around the warp threads by the aid of blunt-pointed needles and then tied in such a way that by each knotting two of the warp threads are bound. When the Turkish knot is used, these two threads are bound side by side. When the Persian knot is used, if tied tightly, one is bound in front of the other. After each row of knots one or more weft threads are passed through between the



Showing the left and right Senna knots and the Ghiordes knot both before and after the trimming of the pile.

warp threads and then beaten down with a sort of a comb. The pile is then trimmed to the desired length. The Caucasians and Kurds, as a rule leave a long pile, while the Turkomans and Persians clip theirs quite short. Close trimming brings out more minutely the color variations. The tighter and closer the knots are tied,—which is determined by the closeness of the warp threads, and the number of the weft threads between,—the more durable the fabric. Loosely woven, long-knapped rugs have more sheen than do

the tightly woven short knapped ones, as the long ends untwist and become more lustrous.

An Oriental rug has three values, first, the art value, depending on its color and design, second, the collector's value, depending upon its rarity, and third, the utility value, depending upon durability.

One likes to buy these rugs from a man of some of the eastern lands. He

ible. In my country we walk on them with a soft foot. We sit on them. But your heavy chairs, your furniture, your boots,—no it is different." "The most beautiful rugs in my home were of my grandfather's time. They were not worn,—oh, no. They were perfect, with the softness and sheen of usage, and the colors, not so bright and strong. My grandfather's rugs had reached their perfection



A Turkish loom.

may have the business principles of the Oriental, but he knows and loves his rugs. Ask him a little more as to the design of a rug and where it is made, and he locates the spot in a very definite way, and unless you are a traveler or have an expert knowledge in things Oriental, he is immediately in a world practically unknown to the Occidental. Asking one such dealer, who is an American citizen, but whose fathers came from a far country, as to the life of the Oriental rug, he said: "In my country they last always, the wear is not hard,—but here, with your heavy shoes, it is different. They are not indestruct-

in my youth. Three generations, yes, that time makes a beautiful rug perfect." "In my country we wear no shoes on our rugs, we do not beat and tear them. The floor is not the only place for a rug. We have many uses. Yes, you see many prayer rugs, and saddlebags, and sometimes the rugs which young girls weave for their dowry. The pattern, the colors, they all mean something." He caressed the rug under his hand.

From time immemorial the Oriental has been putting the best of his life into these tapestries, much of his thought and all of his imagination. "The transmission of

ancient patterns has been going on from century to century, the old designs and colorings being copied by weavers from one generation to another and many of those used at the present time are doubtless the same that were used in the time of Abraham."

"Each district, tribe or family had its characteristic patterns and color combinations which were regarded as its individual inheritance and were never copied by other districts, tribes or families. So it is possible for the expert to tell the locality from which an antique rug came, but the source of the modern one is not quite so accurately determined on account of modern changes in design.

The secrets of the eastern dye-pot are responsible for the unrivaled beauty and durability of the Oriental rug. These secrets of extracting coloring matter from roots, leaves, flowers, barks, and various other vegetable and animal products by a process of boiling, fermenting, etc., were guarded religiously and descended from father to son, many of them having been lost as the family became extinct. Each dyer or family of dyers has some peculiar and secret method of producing certain colors or shades.

Our much greater knowledge of chemistry has been of little help to us in our efforts to produce certain colors or to duplicate those which the Orientals produce with the simplest ingredients and without any scientific knowledge of chem-

istry. Every kind of plant from which dyestuff is obtained is dependent upon certain conditions of climate and soil. For this reason colors in one locality may be superior to those of another, and thus affect the rugs of the locality. Most vegetable dyes fade, but they fade into softer and more pleasing colors. Hence the greater beauty of older rugs.

The methods of weaving, however, have not changed in a thousand years, in the Orient. While in a few places the best artisans are men, in most sections the weavers are mostly women and children. Little children begin working at the loom when they are only four or five years old, and serve an apprenticeship of two years, after which they receive a few pennies a day. Rug weaving is the whole life of the women, with perhaps a little gossip. It is their amusement as it is their source of income. Many of the girls, especially in Asia Minor, with their earnings buy perforated gold coins with which they decorate themselves, as trophies of their skill and as doweries for their marriage.

In one of his books on Oriental rugs, Dr. G. Griffin Lewis says that if the women of the Orient are ever emancipated western countries will have much more difficulty in getting eastern carpets than at the present time. Only in a land where time is of little value and is not considered as equivalent of money can such things be done.

NOTE—The illustrations of the Oriental looms and of the knots are used by the courtesy of the J. B. Lippincott company, two of whose books on Oriental rugs, to which we are also indebted, are noticed in another department.

Picturesque Philippine Ruins

Monroe Wooley



WARS, typhoons, and earthquakes have combined to make the Philippines rich in ruins. Perhaps no land anywhere can boast of a greater number of picturesque ruins, considering size, than can the island empire

we own. The Spaniards as overlords of the country believed in solid forms of construction. Stone and galvanized iron were their favorite materials. But even these buildings could not withstand the onslaughts of war and the elements.

There is scarcely a town which cannot boast of one or more large ruins, either in the form of a church, a government building, or a private residence. Vegetation grows rapidly in the tropics, and over the remains of the old buildings (some of which were built centuries ago) dense growths have clambered in wild profusion, adding to the beauty of the picture. Many an American has sighed regretfully when viewing these old ruins, no doubt realizing what fine country homes they would make with a little renovation and remodeling if they could be transported bodily across the sea. But ruins, as in the case of live stock, is one of the things that cannot be brought into the United States. Publicity committees have long since become aware of the value of the ruins about Manila as show places for sightseers. But outside of this the old buildings are not being made use of to any extent. Now and then the government finds one that seems fitted for rebuilding to advantage, but this is not often.

If Americans cannot



"A Philippine Ruin."



A garden wall in San Diego.—Irving Gill, Architect.

transport bodily the picturesque ruins from the Philippines they can do a much more satisfactory thing. They can have the picturesque without the ruins. Romance has woven itself so inseparably about the old ruinous and picturesque buildings that it has taken us long to realize that new buildings, planned to meet modern needs in the fullest degree, can also be given the element of the picturesque. The archi-

tect with a vision realizes this and many modern homes have the charm of detail and the picture values. California architects, familiar with the picturesque phases of the missions and perhaps of these ruins in the Philippines, are giving us some extremely interesting work. Notable among these architects is Mr. Irving Gill, of San Diego, a picturesque bit of whose modern work is shown.

Working under a brilliant semi-tropical sunshine and in a land where vines and shrubbery follow closely after the thought, architects, artists and home builders are developing possibilities which will ultimately affect the whole country.

"Our Big Idea"

Edward L. Singsen

A Building Experience by One of Keith's Readers



WE are writing this little story, my wife and I, of the creation of our home because we believe it to be unique.

When we became engaged, almost our first thoughts were of the house which some day we should make into a home. Many an ordinary couple (for we like to tickle our vanity with the thought that we are as much out of the ordinary as is our house) has started in the same way, and has dreamed of a cozy cottage, or a wonderful bungalow, and ended by renting a five-room flat. We also dreamed of a cozy cottage,—and looked for a "desirable" flat.

The problem of acquiring a house to conform to our specifications on an income of about one hundred dollars a month seemed so difficult of solution that we had almost given it up when we struck the "Big Idea." While visiting friends one day in a neighboring suburb, we were shown the story



A building which looked like a barn.

and a half building which looked like a barn, and told that they (our friends) were considering the advisability of remodelling it, and renting it to some "nice young couple" (with particular emphasis on the "nice young

couple"). That set us to thinking. The result was that we persuaded our friends to sell us the building with a good strip of land, and let us do our own remodelling. Things began to look rosy, yet the financing of the project cast a shadow of doubt over our plan. It would cost money, but that, too, was compassed as part of the big idea.

In arranging the floor plans, which we did ourselves, every foot is utilized to the best advantage, thus making the house, although quite small, appear very roomy and comfortable. The smallness of the kitchen, with its convenient arrangement of pantries and cupboards, allows for the roominess of the living room, with its big open fireplace.



Our house as we have made it.

From our blue printed plans we made contracts for the remodelling of the building, covering all of the details, which should convert it into our wonderful home. Thus we knew the cost almost to



Three steps to the landing.

a dollar before we went ahead, and we figured that by having mill work and materials all prepared and supplied under contract we had reduced the cost to our price, so that we need not hunt the "desirable flat." My "partner" was on the job practically every day during the building operations to settle vexed questions as they should arise.



These stones were all brought from the beach.

The cuts showing our home as we have made it, and the building as it stood before alterations were made, tell the story at a glance. The barn door was taken out and the upper part of the space filled with a triple window. Beyond is a hood-

ed door. The loft door was closed and a window cut in on either side of it. A piazza was built on the front, screened in to make it a real summer living room. The outside chimney, built of tapestry brick, which gives a flue for the living room fireplace, can be seen through the tree. The old chimney was used for the furnace. Cement steps were put in at one end of the piazza and at the entrances.

The living room has the pleasant coziness of the big "homey" room. Comfort is the key note, and this is carried out even in the tan oat-meal paper and the natural oak wood work, which seem to reflect the feeling of companionship which the cobble-stone fireplace originates. To us this fireplace is without an equal in interest and beauty. A photograph may reproduce the lines and detail, yet it cannot show the many colors of the stones with their flecks of mica and marble hues, nor the romance of its building. These stones came from the famous Pebbly Beach at Block Island, R. I. My wife and I went down there with sacks and picked up every stone ourselves, each one selected because of some beauty of color or form.

After the informal ease of the living room, the almost severe lines of the Sheraton mahogany furniture give a touch of formality to the dining room, while the French doors add a sense of hospitality and good cheer.

The kitchen and pantries almost shout efficiency. The arrangement of the sink and set tubs makes possible the use of the zinc cover to the tubs as a drain board and general working surface. Hot cooking utensils may be placed upon it without injury to it, obviating the necessity of putting them in the porcelain sink. The gas range is another feature worthy of note. It is built

on the fireless cooker principle, with two large ovens, one a broiler, packed and lined like a fireless cooker. In cooking our Thanksgiving dinner we put a thirteen-pound turkey, two kinds of potatoes, turnips, squash, onions and a cake, all in the oven at once, had the gas on for a little over an hour, and two hours afterwards the dinner was served, piping hot, everything cooked to a turn, yet nothing overdone and no mixing of flavors. The steam did not make the cake soggy nor did the flavor of the onions permeate the other vegetables. The range has the ordinary arrangement of surface burners, except that they are covered over with a cast iron top, with lids similar to a coal range. This arrangement has proved very satisfactory as many utensils may be kept warm while but a single burner is lit.

To the right of the range is a kitchen cupboard which holds all the aluminum cooking utensils, a bread mixer, an electric flat iron and other things. In the pantry connecting the kitchen with the dining room, is a dish closet and a lower cupboard for flour, sugar, etc., on either side of which is a row of very useful drawers. A cold closet opens off this pantry, in which is refrigerator and numerous shelves to accommodate supplies of various kinds. The kitchen and pantry floors are covered with the best cork linoleum. The walls are painted light buff; the woodwork is yellow pine, finished natural.

Upstairs are two bedrooms and a bath. The latter has charmed all comers with its blue and white color scheme. The woodwork is white enamel, while the floor is covered with an inlaid linoleum of tile design in blue and white. The walls are wainscoted about four feet high with a pressed tile finish, and the upper part of the walls is tinted blue. The built-in medicine cabinet and the clothes

chute are conveniences which cost practically nothing and are almost indispensable.

The smaller of the two bedrooms has two windows in it and a good sized clothes closet. The woodwork is in white enamel; the floor is hard pine. The walls are covered with a dainty paper of soft chintz design, with a drop border of apple blossoms.

The larger bedroom is the owners' pride. It has two casement windows on opposite walls with two full size windows on another wall. The woodwork and floor here are the same as in the other



A touch of formality to the dining room.

bedroom. A large roomy clothes closet with a chest of drawers in it and provided with an electric light, opens out of this room. We count it as one of our luxuries because it is large and has a light in it. The room is furnished in mahogany with twin beds of dull brass. The walls are papered with a pretty green paper and a drop border of wild roses.

The hardware fittings throughout the house are all in dull brass. The electric lighting fixtures are of the square mission, wall bracket type, with a semi-indirect dome in the dining room, beautiful in its plain simplicity. The ornamental hinges and the hexagonal door knobs of the characteristic craftsman design, all lend that air of distinction which marks the worth-while from the commonplace.

These little marks of what we are pleased to call good taste are not expensive, but they show a degree of thought not always given to the construction of inexpensive homes. It is more the thought and care than the money that has made our house so attractive and comfortable, just the little things here and there which make all the difference between the ordinary and the exceptional house. That it is not the money which makes the difference is attested to by the fact that the entire cost, including the land, did not exceed \$3,500, which figure includes the best of plumbing and a hot-air furnace which is the most economical and reliable I have ever known.

The one drawback to our whole scheme, which at one time threatened to disrupt the entire plan, was the question of gas. We had both made up our minds that we must have gas for cooking, yet the local gas company could not be induced to extend its pipes into this district. This caused us some worry and considerable planning. We balked at either coal

or the "blue flame." Finally we solved the problem by becoming our own gas company. We installed a machine which generates gas from gasoline. No! not at all dangerous. The whole secret of its safety lies in the fact that the generator is thirty feet from the house, and that at no time is there any gasoline in the house, and no more gas than is normally flowing through the pipes. Nor is it expensive. We figure that the cost of our gas, figured in the maintenance cost, interest on the investment, and providing for a sinking fund, does not exceed what we would have to pay for city gas. The gas produced burns with a much hotter flame than does coal gas.

The most frequent remark we hear from friends who are shown through our house is, "Why, how do you get so much room out of such a little house?" We do it by putting the room where it is most needed. In laying out our floor plans we believed that large rooms and fewer of them would give most satisfaction. The results have demonstrated our success.

"Home" in An Apartment

WHAT was yesterday a luxury, expected only by the people of wealth, has become today a necessity demanded by every business man for his family. Money making is generally ascribed to the American people as the great motive of existence. Yet there is probably no people to whom a dollar, once possessed, has less value of itself. It is not money, but what money will buy, for which this terrible struggle is made. This is not a miserly or even a saving people. The comforts and the luxuries of living loom so large in the public eye that no effort is too great, no endeavor too strenuous for their at-

tainment. Possibly the spirit of competition is at the heart of the matter. It may not be so much that people require these things for themselves as that they are not willing that their neighbors and friends shall seem to have more.

In no other line is this so apparent, with the possible exception of the automobile, as in living accommodations. The big, handsome "home" has been sacrificed, even by people of wealth, to the luxurious small "apartment." There has been a shrinkage in the cubic contents of the family home, with a distinct sense of relief both to the man of the house and to its mistress, overworked with the care

of many servants, and a large house.

The apartment, or any type of the multiple family house must originate as a matter of investment, as a general thing, though the co-operative apartment house has made its place in some of the more congested centers, among a certain class of people, and will probably develop further.

In general the greatest disadvantage of the apartment house is the exterior. It may be large and handsome, but it cer-

tainly is not homelike. The barnlike appearance of the ordinary duplex depreciates the property in any neighborhood in which it appears. No building which lessens the value of adjoining property is ethically good or right. Such effects will not follow if it is artistically good. Large and pretentious apartment houses have been built along the same lines as hotels and business blocks. They are in fact business buildings. No thought of home is associated with them. It is generally conceded that the great mass of apartment houses have been built with little or no architectural skill devoted to their

design. The so-called duplex is almost entirely "contractor built," and looks the part. The interiors are planned to meet the need of that sometimes terrible person the "hypothetical tenant," but as a whole the planning is good. Otherwise the right kind of people would not rent it. Public sentiment has not as yet taken cognizance of the exterior. So many generations of city people, descended from the old "brown-stone front," have only been sure they were entering their own



[A model triplex.

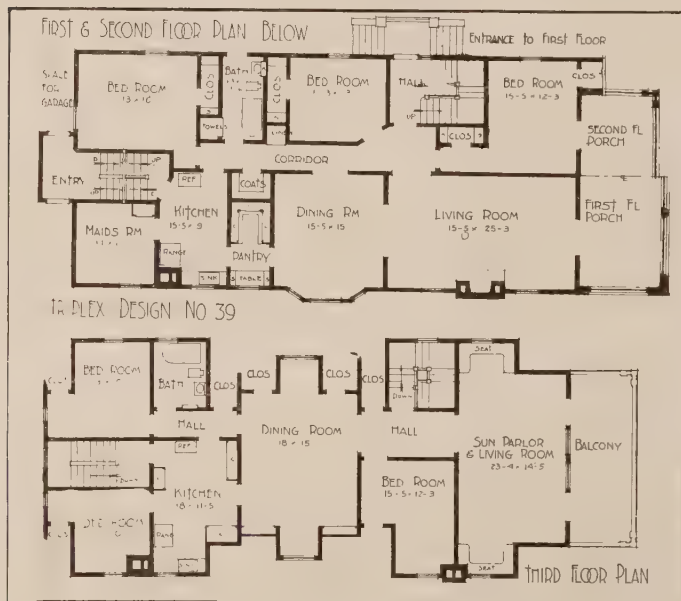
Walter J. Keith, Archt.

tainly is not homelike. The barnlike appearance of the ordinary duplex depreciates the property in any neighborhood in which it appears. No building which lessens the value of adjoining property is ethically good or right. Such effects will not follow if it is artistically good. Large and pretentious apartment houses have been built along the same lines as hotels and business blocks. They are in fact business buildings. No thought of home is associated with them. It is generally conceded that the great mass of apartment houses have been built with little or no architectural skill devoted to their

home by looking at the number, or because the latch key fits, that the individuality of the "apartment house home" has not yet been demanded. The thought is already in the minds of people but it has not yet been loudly voiced. The architect has heard it and the real estate investor will soon feel its pressure.

A "Triplex" as An Investment

The cost of building has increased by leaps and bounds. The many luxuries now generally considered necessities, coupled with the more thorough and better class of construction and generally higher wages now prevailing, account in



In cities of the second and even of the third class, apartments on the first and second floors, smaller and less desirable in every way than in the design here illustrated, but in a desirable locality rent for \$100 per month each, and the tenants are compelled in addition to run their own individual heating plants; while smaller apartments on the third floor rent for from \$50 to \$60 per month. What then would be a fair and

large measure, for this increased cost of building.

The design for a model triplex here presented embraces what might be called a luxurious home, with a strong individuality, for those to be housed in it. The rooms are large, and there are plenty of them,—for in these days few are content with a living room less than 15x24 feet, and other rooms in general proportion. True, the rooms could be reduced in size, but there remains just as many bath rooms, radiators, windows, doors, stairways, chimneys, laundry fixtures, closets and porches; so merely reducing the size does not save very much, only a little material and labor.

The modern home of today must in addition to ample sleeping and living porches, also provide garage facilities, and all this means increased investment; but as an offset there is unquestionably increased revenue to the investor, for what was considered a few years ago a large rental, is now considered ridiculously small.

reasonable rental for the same apartment heated and with garage facilities included? These are the things which must determine the desirability of an investment and they vary in every city and in the same city according to location and environment.

This design built in a substantial and thorough manner, finishing completely the apartment on the third floor and with an apartment for janitor in the basement, three large individual store rooms, general store room, laundry, and help's bath room would vary in cost according to prices and conditions and the competition among builders for the work from \$10,000 to \$14,000 complete with hot water heat, modern plumbing, hardwood floors throughout, and hardwood finish in the living room of each apartment and in entrance hall.

It would seem, therefore, that this would make a desirable and profitable investment, as such apartments will not fail of steady rentals by responsible people at the highest prices.

Under the Sheltering Roof Tree

THE first essential of the house is the roof, and perhaps for that reason the type of roof often gives the key to the design. Travelers say that the roofs of a city mark its individuality, and distinguish one city from another in the old countries. The overhanging eaves, "the roof tree," stands as the symbol of home in its protection and shelter.

On one side of the living room is the entrance and on the other is the sunporch. The vestibule is of good size and has a convenient coat closet. Stairs to the second floor lead up from the living room near the entrance door. An attractive landing is three steps above the main floor.

The living room is nearly fourteen by



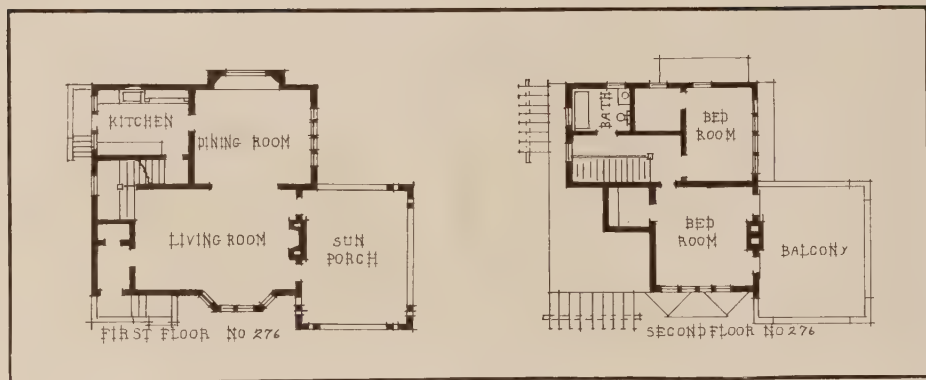
The roof gives the key to the design.

Lindstrom & Almars, Architects

This attractive home has a clever roof treatment. Only the central part of the house is two story and dormers give the necessary height where it is desired. The exterior of the house is finished in cement stucco on metal lath. The vitrified Spanish tile roof has a wide overhang.

The plan is very simple and attractive and yet quite unusual. The main axis of the plan centers on the bays in the living and dining rooms, and the second story centers over these same features.

twenty feet. On the farther side from the entrance is the fireplace with French doors on either side opening upon the sunporch. Back of the living room is the dining room, with a pilastered opening between. Opposite the opening is a wide recessed buffet with mirrors and sash above. The walls are panelled, with plate shelves and cornice. The quadruple group of casement windows are hinged to swing in. The interior of these rooms is finished in hardwood, with hardwood floors.



The kitchen is long and narrow, the shape best adapted to give plenty of wall and cupboard space, with a minimum of floor space. With all of the conveniences at hand, by smallness of the floor space is the housekeeper's work decreased and her efficiency increased. There is less floor to be taken care of, and fewer steps will accomplish the results. Cupboards are built to the ceiling, with bins and drawers under the working shelf. There is a window over the sink. The ice box is built on an outside wall, where it can be iced from the outside. This with space for the gas range and table makes the kitchen complete. It is finished in enamel paint and the floors are hardwood.

On the second floor are two well proportioned bed rooms with large closets.

Each has a group of casement windows. The wall space allows for a good arrangement of the furniture. From the front bedroom French doors lead to the balcony which may be fitted up as a sleeping porch. The bath room is well located with reference to the bed rooms, but it is especially well located with reference to the plumbing pipes. The bath room fixtures are directly over the fixtures in the kitchen and laundry, with all the pipes running up in the wall of the kitchen, making the shortest possible connections for the sewer, and the water supply. The second floor is finished in white enamel with hardwood floors.

There is a full basement under the whole house, containing laundry, heating plant, fuel and storage rooms.

Bungalow with Attractive Cement Porch

THE psychology of first impressions is an important thing to the house builder. The first glimpse of a house gives a bias to the mind which is not easily replaced. The visitor as he enters this attractive porch is prepared to be pleased with the entire house. Indeed, all of the house is planned with the same care and skill.

The porch is eight by seventeen feet. The white cement of the battered columns carried in the porch foundations and terrace and repeated in the cement chimney are extremely effective. The cement also makes an excellent background for planting and vines. The low French windows opening on the terrace from the living room make one of the

attractive features of this design.

The arrangement of the living room and dining room shown on this plan, the architect considers particularly successful, as his clients have found it very satisfactory. It is particularly planned for a small bungalow where the vestibule or reception hall has to be omitted for lack of space. This arrangement gives more privacy to the dining room, as it is out of the view of the chance caller. The fact that each room has an outlook in two directions appeals to the home builder.

The living room is particularly airy as it has doors opening to the porch and



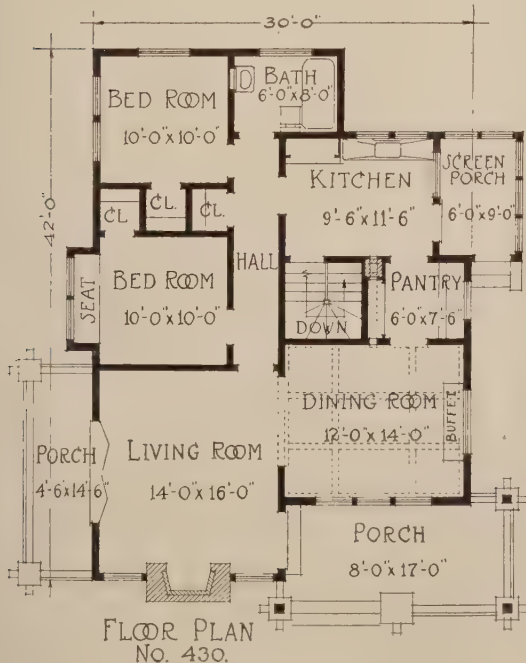
The cement makes an excellent background.

Jud Yoho, Archt

to the terrace on the opposite side, and windows on either side of the fireplace besides. The dining room has a beamed ceiling and a built-in buffet under the window. An unusually roomy pantry connects it with the kitchen, and gives good cupboard space. A little hallway secludes the sleeping apartments from the rest of the house while connecting them and giving entrance to the bathroom from any part of the house.

The bedrooms are not large, but you can locate the furniture nicely in each of them. The double window and seat in the front bedroom makes a very attractive feature. The rear bedroom has windows on two sides, giving cross ventilation. Each bedroom has a closet and the linen closet opens from the hall.

The appointments of the kitchen have been carefully worked out. The sink is placed under the windows and has particularly good sink tables and drain boards. Beside it is a cupboard the full height of the room. The screened porch gives a good working space, which every housekeeper appreciates.



Twin Gables

NOTHING is of greater importance in the planning of a home than the windows. Their placing and arrangement make for the beauty of the exterior and comfort of the interior of the house. Sunshine is the greatest doctor in the world. There is or should be no reason why every household should not have the constant attendance (when on duty) of this great health giver. The architect generally feels it to be one of his duties to plan for plenty of light and air. Then when the figures come in and the cost must be reduced some of the windows are omitted because a plain wall space is a little cheaper than windows, though any one knows that windows are vastly cheaper than doctors' bills, to say nothing of the effect of the omission on the outside of the house.

The house which the owner has called "Twin Gables" is flooded with sunlight. Being set at a slight divergence from the

points of the compass, there is no sunless side to the house. It is surprising how slight an angle, either to the east or the west, will allow the sun to enter the north side of a house. It seems an absurd custom which sets a house in the only possible position which makes the north side of it ice bound during the cold season.

The entrance to this house is recessed, giving it protection, and opens into a good hall which is large enough to give a good connection between the entrance, the stairs, the dining and the living rooms, and yet has a good seat for a waiting guest, not to mention the insidious book agent. One end of the living room is a wide bay filled with windows; French doors open onto the screened porch. A group of windows light the fireplace. Yet these are so arranged that there are good wall spaces. The room is 15 by 21 feet. The wide fireplace is the chief feature of the end of the room opposite the bay. A



The house is flooded with sunshine.

Marion Alice Parker, *Home Planning*.

door from the living room connects with a passage way from which stairs lead to the basement, and which also connects with the kitchen. The rear entrance which is pergola covered, also connects with this passage.

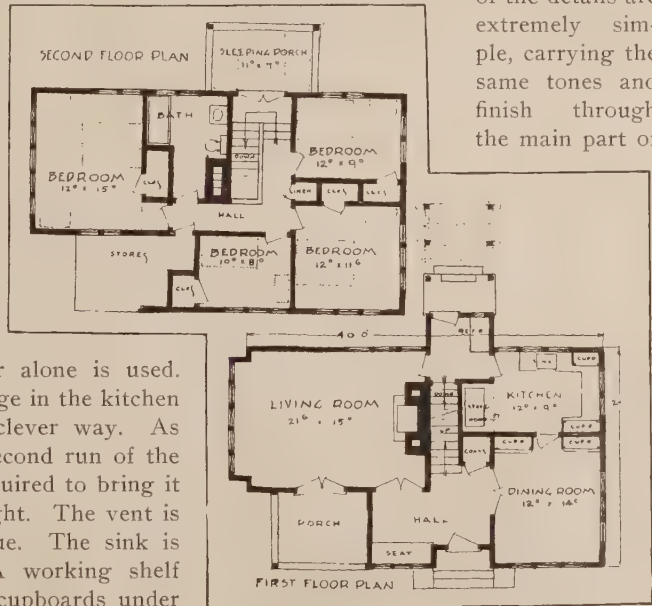
French doors connect both the living room and the dining room with the hall. A coat closet is beside the stairs. The dining room has groups of windows on two sides. Built-in cupboards fill one side of the room. Two doors, one sliding into the wall, closes the dining room from the kitchen to keep out all odors. When the meal is being served the sliding door is pushed into its pocket in the wall and then the swinging door alone is used.

The hood over the range in the kitchen is managed in a very clever way. As it is placed under the second run of the stairs, less furring is required to bring it down to the desired height. The vent is carried across to the flue. The sink is under the windows. A working shelf with bins, drawers and cupboards under it, fills one end of the room, with cupboards over it beside the windows.

On the second floor the rooms are again filled with windows without interfering with the wall space necessary to accommodate the furniture. Each bedroom has a good closet, a linen closet opens from the hall and the space over the porch roof is utilized for storage space. Over the front entrance is a sewing room which may be used as a single bedroom. From the landing of the stairs is a sleeping porch which overhangs the rear entrance. It is arranged to accommodate two single beds or couches. French windows from the landing light the hall and give an interesting vista from the entrance.

Casement windows always make an interesting feature in a house. They open the entire space of the window, instead of only one-half. When properly designed and fitted with the necessary hardware they have proved to be entirely satisfactory, without adding very materially to the expense. All of the windows in this house are casements. The finish and all

of the details are extremely simple, carrying the same tones and finish through the main part of



the first story. The finish in the kitchen is kept in the natural color.

There is a full basement under the house which is arranged to accommodate the laundry, heating plant and the usual fuel and storage rooms.

The gable roof, extended to cover the screened porch, accents the double gable and gives an interesting feature. The wide chimney centers on the main ridge of the roof.

The planting, always a valuable adjunct, is here shown in an interesting way. Bay trees stand at either side of the entrance. Shrubs and flowers are banked against the porch.

A Story-and-a-Half House

THE story and a half house has come into the favor again, which it deserves, for it is convenient, economical, and often picturesque. This house is shown as finished with cement stucco over metal lath, though it would be equally effective in shingles stained either brown or gray, with the roof a little

The plan has a little different arrangement from the typical plans, in the slight irregularity of the arrangement. The entrance is through a vestibule, which has a coat closet, into the end of a well proportioned and good sized living room. The fireplace is centered on one side of the room between windows, and opposite



The main roof extends down over the porches.

W. W. Purdy, Archt.

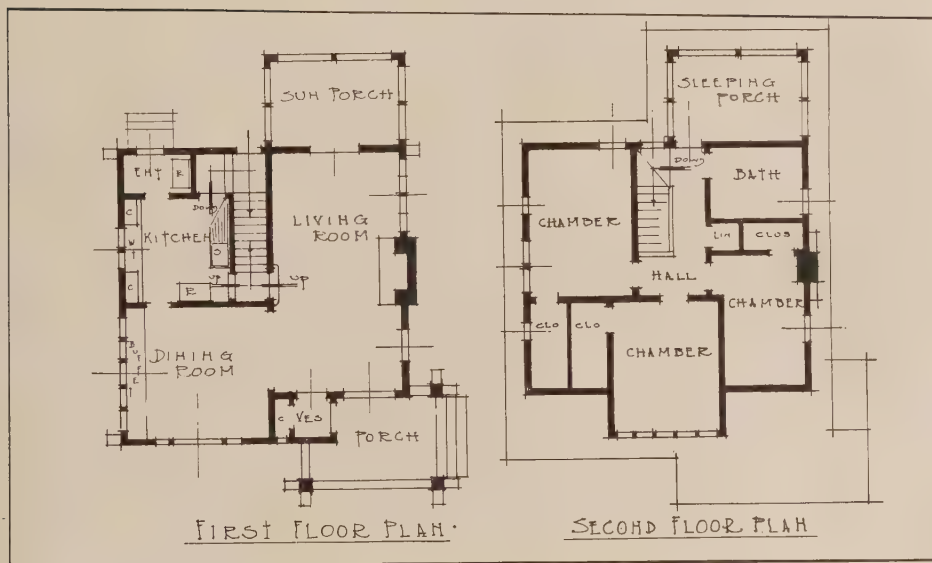
lighter or somewhat darker than the body of the house.

The main roof is extended on one side to cover the entrance porch and on the other, over the sun porch. The rafters are exposed both on the main roof and in the dormer, and the same accent is carried out in the rafter ends which protect the dining room window. The flower boxes built in the porch give a touch of color which might be repeated under the windows and at the sun porch if desired.

is the stair landing. Glazed French doors in the end of the living room opens onto the sun porch, which is also glazed. A wide cased opening gives communication with the dining room.

A buffet fills the end of the dining room under a group of high windows. Two sides of the dining room are largely filled with glass.

The kitchen is very compactly planned. The stair landing is reached both from the kitchen and from the living room side. Under the windows is a work table,



extending the whole length of the kitchen, with bins, drawers and cupboards under. Cupboards are built on either side of the windows. The refrigerator is placed in the entry. The basement stairs are built under the main stairs with an outside entrance at the grade level.

On the second floor are three chambers, with good closets. Coming under the roof as they do, there is good storage room beside the hanging space.

The bath room is of good size. The sleeping porch opens from the hall.

In the basement is the laundry, fruit and vegetable rooms, place for the heating plant and fuel rooms, and a toilet.

The exterior has a red and white color scheme, with the red of the roof, which may be a light red asbestos shingle, and the very light gray of the rough cast cement stucco. The chimney is stuccoed over, with a cement cap.

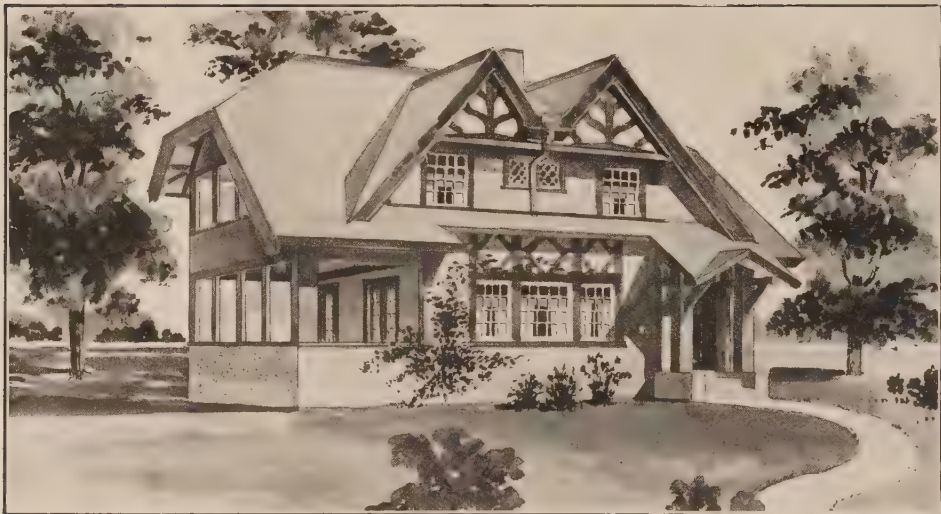
The Cottage of Your Dreams

A TIMBER and stucco cottage, a hooded entrance, overhanging gables, small panes of glass, clambering vines, all of these are what you expect in that charming little cottage you are going to build. Add to these a glazed piazza and a sleeping porch, a fairly large living room, convenient kitchen and compact plans; does not it seem like a description of the cottage of your dreams?

This cottage is really very well planned to utilize all of the available space. No-

tice the turn in the stairs which, while allowing them to lead from the living room as well as from the entrance, at the same time makes space for a coat closet. The basement stairs and grade entrance are under the main stairs. A short run of stairs from the kitchen leads to the main stair landing, giving the desired communication with the rear of the house.

The living room, across the front of the house, is a little more than twenty by



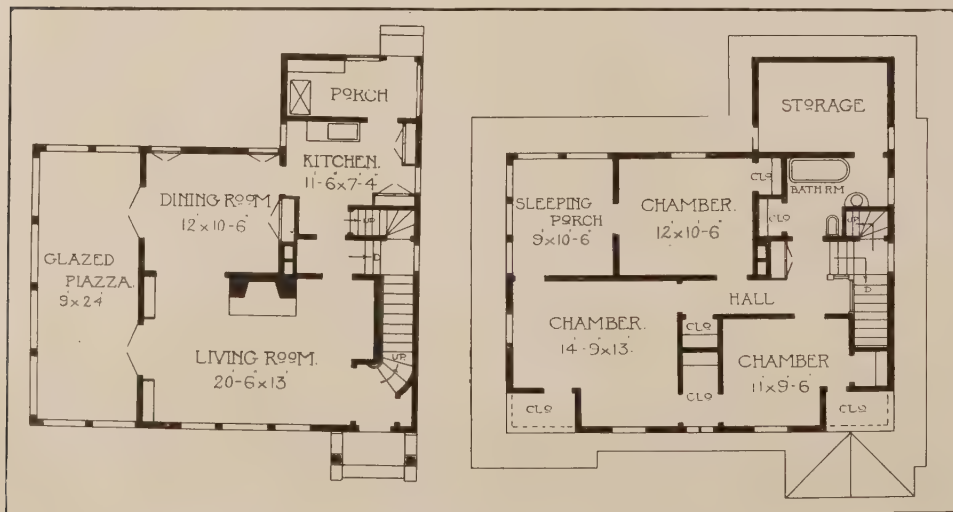
A timber and stucco cottage.

Chas. S. Sedgwick, Archt.

thirteen feet. The wide fireplace is centered opposite the group of windows. Beyond is the dining room with a wide opening between. It has a conveniently built-in china cupboard. Both living and dining rooms open by French doors on the glazed porch. The living room has bookcases on either side of the French doors.

The kitchen is fitted with cupboards. The sink is well lighted. The screened kitchen porch has shelves and may be used for a working porch or summer kitchen. The refrigerator is placed here.

On the second floor are three bed rooms and a sleeping porch communicating with two of the rooms. The two front bed rooms connect through a large closet,



each of the rooms having an additional closet under the roof. The hall closet will prove very useful. The linen cupboard is opposite the landing of the stairs. The bath room is located over the kitchen and gives very direct connections for the plumbing fixtures. The storage space under the roof of the kitchen porch opens from the bath room. The second floor is finished in pine and painted white. The floors are of birch.

The main floor of the house is finished in Washington fir, stained a "Mission" brown. The floors are oak and finished in the natural color.

The height of the first story is 8 ft. 6 in., and the second story is 8 feet. The double gable gives full height to the rooms. The roof is shingles and the eaves have a wide overhang. The gables have virge boards, with the rafters exposed on the under side. The exterior is finished in cement stucco on metal lath, and given a creamy tint. The timber work and casings are stained a Mission brown while the roof is stained a dark red. The architect gives the estimate of cost of building as from \$3,400 to \$3,800 exclusive of the heating and plumbing. There is a full basement under the house.

Home for a Physician

IT IS almost necessary for a physician to have an office in his home or a den which he can use for an office when he wishes. The life of a physician can not be so regularly ordered as that of other men. He can not close his office doors downtown and shut out business calls until he opens them again. His work follows him day and night.

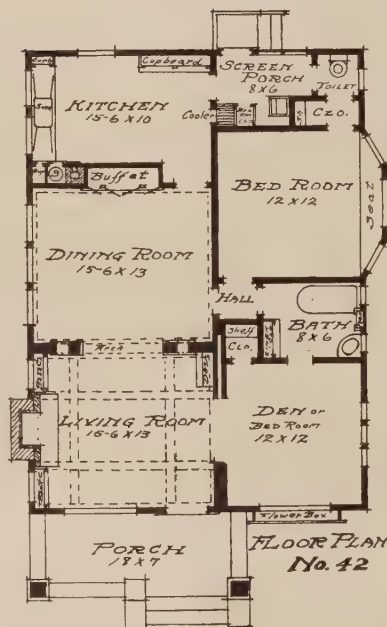
In this plan the den is a good-sized room, opening off the living room. It does not invite business with an outside door, though this could be arranged if it were desired. It simply takes care of the merciful business which is thrust upon it. The arrangement is not unusual in any way. The entrance from the porch is directly into the living room. A fireplace and windows fill the side of the living



The wide eaves are carried on brackets. Bungalowcraft Co. Architects

room opposite the den. It has a beamed ceiling, built in book cases and cozy seats with hinged tops, giving "tuck-away" places for papers and magazines and the usual general miscellany, or they give a place for the children's playthings. The dining room beyond with its wide opening is only partly screened. A buffet is built into the wall opposite. The niche

thus formed in the kitchen makes room for the chimney and the hot water tank beside it. The white kitchen is a model of convenience, and one of the most attractive rooms in the house. The kitchen appointments are quite complete, with long sink tables, and cupboards at the ends, while there are unusual conveniences opening from the screened porch. These include a "cooler" with a door to the kitchen, a tiny broom closet, an extra closet, and a toilet which opens also through the closet to the bedroom. This bedroom has a large bay of windows and a window seat. A tiny hall connects this bedroom with the dining room and also with the bathroom,



which again opens into the den. This arrangement allows the den to be used as a sleeping room, if so desired, for it is provided with a good closet, and may be shut off from the living room by the sliding doors.

This house is about 30x46 feet. The exterior is of wood. It is shingled up to the water table and weather boarded above. A flower box under the den window adds a touch of color to the otherwise dark exterior. The roof is shingled, built at a quarter pitch, and so strongly built that it

will carry any snow load. The wide eaves are carried on brackets, which with the cornices are stained to match the weather boarding.

Homes of Individuality

Selected by W. J. Keith, Architect

A "Dutch Colonial" House
A WELL designed colonial entrance always gives a note of interest to a house. The gambrel gives two angles to the pitch of the roof. The pitch at the ridge is continued over the big dormer, which in its place carries up the lines of the two bays. The gambrel is only framed at the gable ends, giving a full second story height for the bedrooms.

The floor plan has the central hall so usual in the fine old colonial houses. The stairs are set so far to the rear of the hall that the full nine feet of width makes a

hospital entrance. Glass doors connect with the living and dining rooms. The living room is the full width of the house, with the recessed fireplace, and with bays at each end of the room filled with windows and a seat. On the other side of the house the dining room has a corresponding bay. An extension beyond provides an unusually roomy pantry, well supplied with cupboards. Communication between the kitchen and the front hall is supplied through the small rear hall, which connects as well with the rear stairs to the main landing, and also down several steps to the grade entrance and



The delicately detailed entrance is effective.

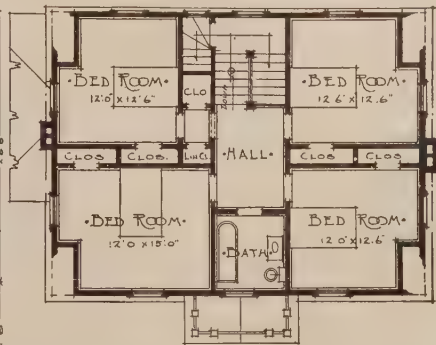
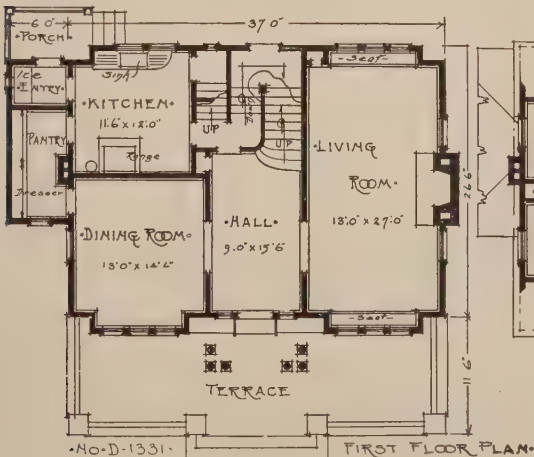
to the basement. The arrangement of the stairs is very compact and very good. The kitchen has the usual conveniences. The ice box is placed in the entry, beyond which is the rear porch.

On the second floor are four good bedrooms and a bath, each with windows in two sides of the room, and with good closets. This makes all of the bedrooms corner rooms, with cross ventilation. An extra closet and the linen cupboard open from an alcove of the hall.

In the basement are placed the laundry, the heating plant, vegetable and fuel rooms.

A Narrow House

Here are plans for a seven-room house which is under twenty-six feet in width. The stone piers of the porch and the long sweep of the roof give an interest to the approach. The entrance from the vestibule is directly into the living room. On the plan, this direct entrance allows the living room to extend the full width of

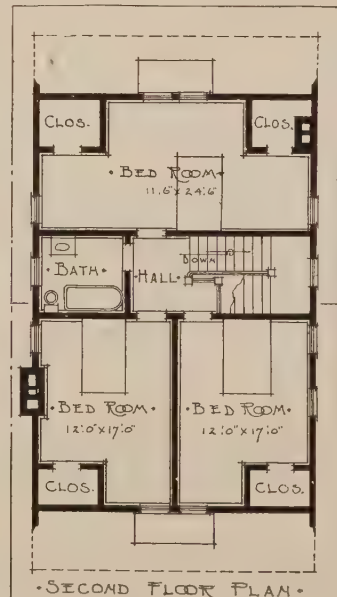
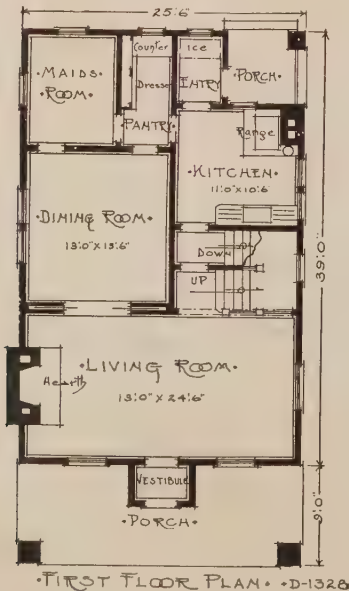




The stone porch piers give an interest.

the house, with dimensions of thirteen feet by twenty-four. The fire place is the main feature of one end of the living room, with sliding doors to the dining room just beyond. The stairs are partly screened from the other end of the living

room. The stair arrangement is exceedingly compact and convenient. While there are two doors between to prevent odors from penetrating, yet there is direct communication between the kitchen, the stairway, and the front door.

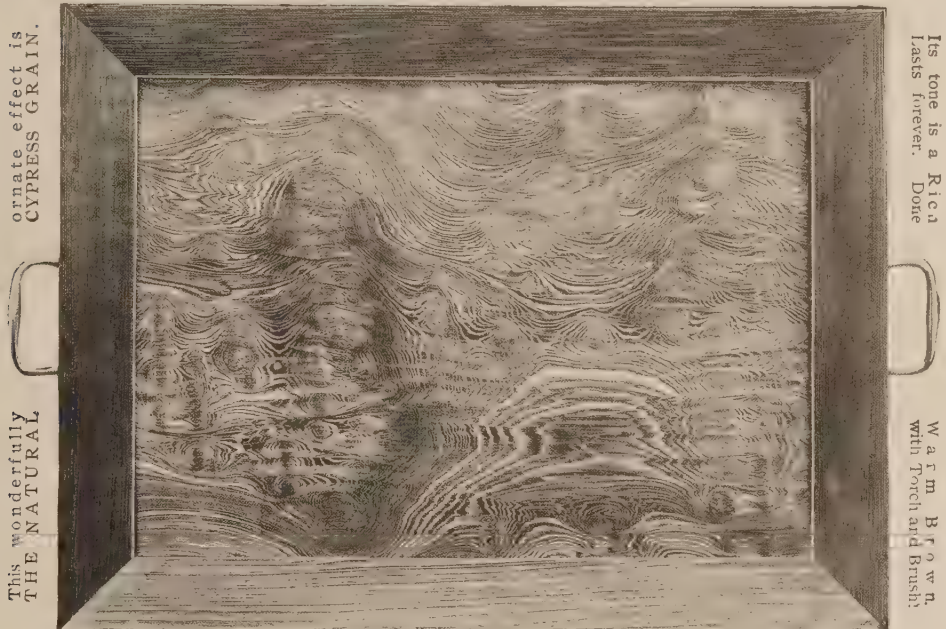


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The Case for Yellow



HY I do not know, but it takes a great deal more courage for the average person to use a good, strong yellow, than to adventure with red, or even with vivid green. And yet yellow is such a valuable color from the decorator's standpoint. It is a becoming color, as neither blue nor lavender is, it does not try the eyes and the nerves, as red does, and it gives an illusion of sunshine to the dullest room. All these are strong points in its favor, and yet it is very little used. Perhaps it has for most people a suggestion of splendor inappropriate for daily use, derived from seeing old fashioned drawing rooms, whose heavy mahogany furniture was covered with yellow satin damask.

Be that as it may, yellow is an admirable color and deserves to be more popular than it is, both in its own tones and in those of its sister, orange. It is equally adapted to cheap or expensive furnishings, and goes well with a good many different woods.

In selecting tones of yellow it must be borne in mind that it loses a great deal by artificial light, the light tones looking extremely washy at night. This is not very material in a bedroom, but in a living room must be reckoned with. A yellow of about the color of daffodils is a good wall color, though, of course the vivid tone of the flowers is subdued somewhat for decorative uses. A tinge of either green or brown is an improvement, though it should not be sufficient to change the character of the yellow greatly. These modifications give us mustard and citrine, both capable of good things in combination with the right sort of furnishings, but not specially beautiful in themselves. Old gold, another

modification of yellow, is a charming color for a background, especially in some sort of wall covering which has a sheen. I know of a drawing room where Japanese grasscloth in old gold has been used for the walls, as a setting for a collection of fine old mahogany. It is a color that one very often sees used as a lining for the walls of small galleries in which either china or pictures are shown.

Plain or Patterned!

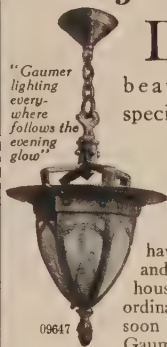
You can get a very good yellow in the different sorts of wall coating, and this surface is excellent for back halls, for bathrooms, or for bedrooms, but I do not think that a painted yellow wall ever looks well. The best sort of a yellow paper is one in an all-over pattern, not too small, in two tones only slightly differing in depth, in which the design is carried out by means of a line of the darker tone. This is the sort of paper which originated with William Morris, but his ideas have been largely borrowed by later designers, and papers of this kind are made by all the best factories in the United States. The two toned yellow striped papers are not bad, but are not nearly as decorative as those with a pattern. When a modified yellow, like citrine, is used, and in a room with many pictures, so that there are no large wall spaces, an imported ingrain paper is satisfactory.

Woodwork for Yellow Walls.

A patterned yellow wall is charming in a room with a high white wainscot, but when there is only a surbase and the ordinary door and window frames, they had better be of a darker color, which makes a less vivid contrast with the strong yellow. Either brown mahogany,

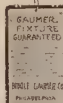
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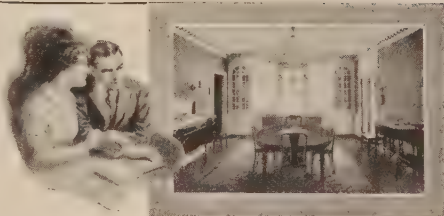
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or brown oak looks well with yellow, and best of all is black, which is much used by English decorators. Now we have got used to cretonnes with a black ground and to black carpets, black woodwork ought not to seem eccentric. Mustard and citrine can be used successfully with rather dark weathered green woodwork and furniture.

Blue China in the Yellow Room.

The taste for blue china is so widespread that its proper setting is a matter of interest to many people. Too many assume that a blue room is the best thing for it. Yet I am quite sure that nowhere, as a rule, does anything offend the artistic eye like the room with much blue china and a blue and white wall paper. It is quite possible to get a dull blue paper which will be a good background for some pieces of blue china, and if one's china is all of one shade of blue, the room may look very well. But this is seldom the case, and the blue which will harmonize with Staffordshire may be hideous with Canton or Delft. As for the figured white and blue wall paper, which the decorator will probably recommend, it will give you neither harmony nor contrast, but a hopeless jumble of tones, when you come to set out your china. If blue and white has an irresistible attraction for you, as it has for some people, have your room frankly white, white paper, white woodwork, and for rug and curtains use the dulllest blue you can find, in a medium tone.

But, as far as blue china is concerned; one charm of the yellow wall is that any and all blue china is at home with it. Whether it is the very deepest blue of some of the Chinese wares, the brighter but still dark tone of the Staffordshire, the medium shade of Nankin, or the gray blue of Canton willow pattern, one and all contrast delightfully with a yellow wall. For myself, I have a great liking for green as a setting for blue china, but for pleasurable daily use there is no comparison between yellow with its effect of perpetual sunshine and the soberness of the low toned greens which can be used with positive blues.

Yellow and a Neutral Scheme.

One merit of yellow is that you can make it the high light of a neutral scheme of color, for the ground floor of a house without spoiling the harmony of the whole thing. With buff in the drawing room, golden tan in the hall, golden brown in the library or living room, you can have a yellow dining room, not of course choosing a very vivid shade. Or, keeping the neutral tone in all the other rooms, you can have a small formal parlor in yellow. And for this use you will find a not too strong yellow a delightful background for all sorts of dainty furnishings. If you happen to have delicate line engravings, or old prints, in gilt, or narrow black frames, they will be much at home on the walls.

When the whole floor scheme is in low toned green, one room may well have a citrine wall, which is a delightful background for blue and green furnishings, and for furniture in very dark wood. Black and gold Chinese lacquer, which is now so popular is brought out well by a citrine wall.

The Need for Caution.

Any extensive use of orange is a difficult matter. It is unfortunately a particular color, and is at its worst in cheap materials. Orange cottons are horrible, except in the form of velveteen, when they have lost their distinctive cotton character, and there is not much more to be said for orange wool, except in rugs. Even in wallpaper, orange seems to need the suggestion of richness and to imitate silk or leather. But in silk damask or in Spanish leather, and in tones a good deal lower than those of nature, it is a stunning color to use for the high light of a brown room, and all the better for the purpose if it can be associated with either bluish green or greenish blue. A dusky, brownish orange in either a silk fiber or a leather paper is a delightful wall covering for a hall, above an oak paneling.



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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

EDITOR'S NOTE.—The courtesies of our Correspondence Department are extended to all readers of KEITH'S MAGAZINE. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Locating the Fireplace.

A. H. L.—We are building a new story-and-a-half bungalow in this suburb of Chicago. We want an attractive interior as well as exterior. Having built two beautiful homes some years ago, with the aid of your magazine, one of which especially was so pleasing and attractive that we were able to sell it with a good profit, we thought it quite impossible to build a pretty modern little home without your magazine and your special advice. What I want to ask is, where to place the mantel. The house faces south and east toward the Desplaines river. Would very much like the mantel in the living room, but find no place except in corner of stairway and bay window. Would you place it straight or diagonally? or would you put it in dining room opposite window? or would you advise a mantel in music room? We don't like to go to the expense of more than one mantel. Would you also please advise us how to decorate the walls of the living room, dining room and music room in a pretty, inexpensive way? The three rooms and stair are oak. I also have a large velvet rug, rather bright green, size 12x16, with small figures of tan, red, black and blue. I could possibly make two rugs of it, one 9x12 and one 7x12, but there is not enough of border for the two rugs. I have also tan body brussels and a Wilton velvet blue. My best furniture is mahogany, with green upholstery.

Ans.—We advise locating the fireplace and mantel in the music room on the east wall, making a high window each side of the mantel in place of the group of three windows you now have on the sketch.

In view of the your rugs and furnishings, we should treat these two rooms, viz., den or music room and living room,

together and use a scheme of green and blue through them. This will suit the south, east and west exposures and enable you to work in your rugs. We would use the oak trim in hall and dining room, with oak floors throughout; but in living room and music room we advise birch stained dark mahogany, as best with your furniture.

The large 9x16 rug we would divide, making one 9x13 rug for the living room. The remainder we would have woven up into two small rugs which would be very good in the narrow spaces of the hall. It would be a very great improvement if you would have the living room portion of this rug dyed a darker, richer green and the expense would not be great. We would then use on the walls of both rooms a paper in a small-figured all-over design in dull greens and blues, and place the blue velvet rug in the music room unless it is too light and too bright, in which case we see nothing for it but to dye that also a dull, deep blue. The tan body Brussels should go in the dining room with the oak furniture and woodwork. It would be pretty to do the walls of the dining room in old gold grass cloth paper with ivory ceiling. A plain paneled wainscot would add to the room, of course. We would have a center light in living room; also side brackets each side bay window and a center light over table in dining room. Side lights for balance of house.

Brown Mahogany.

M. L. G.—I would greatly appreciate suggestions that you might make in regard to the wall decoration, woodwork and furniture of the dining room, living room, den, hall and bedroom of the enclosed rough diagram. The house faces the west and south. There is a circular

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porch extending along the entire west and south of living room.

The dining room has triple windows with south exposure. The house is finished in yellow pine but what would you suggest as to the staining. Which do you consider the better, sand finish or smooth plastering for the walls?

We have a few pieces of mahogany furniture, piano, chairs, etc., but are not certain whether we wish the entire living room furnished in this way.

We had thought of finishing the living room and den in brown and dull green and dining room in old blue.

There are sliding doors between the dining room and living room. The latter is separated from the nook by colonnades.

Ans.—First, the finish of the woodwork is to be considered. We think for a small house with pine for interior trim, we would not furnish the living room entirely in mahogany. If the pieces you have are supplemented with a few wicker pieces, we think you will like the effect. In that case we would use a brown mahogany stain in living room and den. There is a new stain called English brown, which would be just the thing. As it may be difficult to get as yet, you can come very close to it by mixing a mahogany and a brown oak stain, half and half. Southern pine takes the stain beautifully.

The woodwork in the dining room we would certainly paint ivory white, if your furniture is suitable. Then with old blue walls and rug it will be very pretty indeed. A soft greyish ecru wall would be the best choice for living room and den, but we would not use green too much in these rooms. A mixture of old rose and green would be better. The rugs could be in mixed coloring of ecru, rose and green, with green predominating in living room furnishings, and rose or dull coppery red in den. Then have fireplace brick of the mixed oriental colors.

As to finish of plaster, if you tint, a sand finish is prettier but do not have it too rough. A smooth sand float is best. In our judgment the wall in dining room at least to chair rail height, should always be protected by a covering of some kind, burlap or paper or grass cloth, as the plaster so soon mars. It can be divid-

ed into panels by strips of wood and finished by a molding at the top, then tint the wall above.

Color for Walls.

O. S. Q.—Would like to have you give me advice on interior decorations for the house in the early spring. Can say there will be oak floors on both second floor and first except kitchen, which will have cork linoleum, all oak trim, plain in kitchen and second floor, the rest quarter sawed oak, all stained dark oak or flemish, except in kitchen where it will be natural oak. Hall and sitting room will have skeleton oak panels 48 inches high and dining room 66 inches high, and there is to be beamed ceiling in the three last named rooms, slab doors, and trim all heavy oak; trim to be square edge and plain. Furniture to be oak and of heavy design. Would prefer flat finish paint for walls. First story, 9 feet 5 inches high in clear, second story 8 feet 3 inches high.

Ans.—In reply to your letter asking about wall color suggestions for interior of your house, the living room facing south and west should have a neutral wall tone, especially with dark heavy woodwork. We advise a cool grey tone for this room. We would suggest the wood greys, merely using a darker shade for the skeleton wainscoting. This grey may be made somewhat lighter in tone by mixing some white with it. Then use the light grey for the ceiling. As the hall is really a part of the living room, we would treat the walls the same, but give variety by using rose red in rug, etc., in hall and old blue, brown and cream in living room rug, with blue hangings and furniture coverings.

Then paint the dining room wall above the wood paneling delft blue, again lightening the tone slightly by mixing some white and the ivory paint for ceiling. We think running the blues and greys through these rooms with touch of red in hall, will make a very pretty effect.

For the wall tints of bedrooms, we advise rose tint and white ceiling for the northwest bedroom. For the southwest bedroom a blue tint. For the southeast bedroom, pale green, and for the northeast bedroom, light tan.



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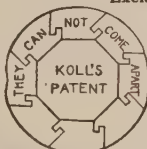
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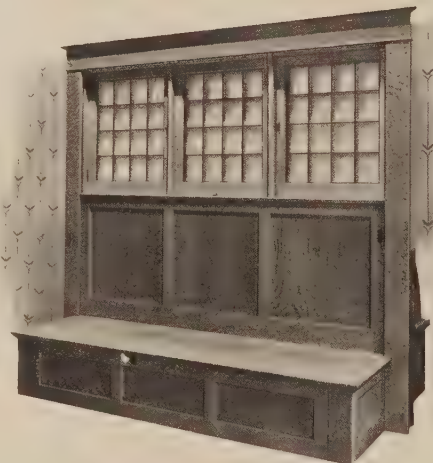
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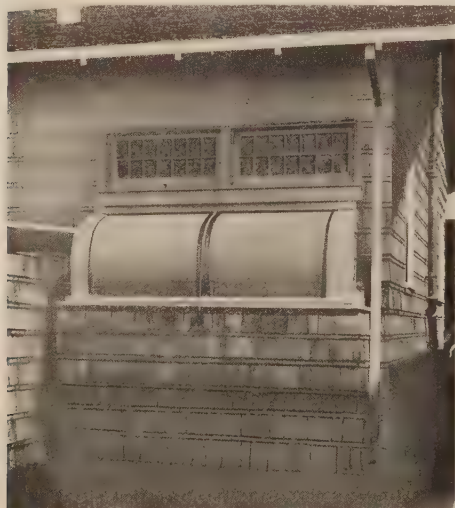
A Fresh Air Bed

WOULD you like to sleep out of doors if you could go to bed and get up in a warm room? The sleeping porch is a luxury, because it duplicates the space of the indoor bedroom. When a house has been built without, it is not always possible or practicable to add sleeping porches just where they are desired.

Small apartments are being built with all kinds of devices to put the bed out of the way in the day time and to utilize the space when it is not being used. Beds are folded into a closet, they turn into a table or a davenport in all sorts of sur-



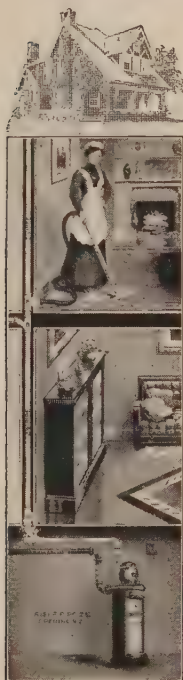
Interior view showing seat and windows.



Exterior view, showing appearance in building.

prising ways. The bed may be partly pushed into a big closet leaving what seems a couch against the wall, remaining in the room. This latter principle has been readapted in a very clever way to make an out-door bed.

A window is built in the outside wall of the bed room with the window opening wide enough to accommodate the length of a bed. The head of the window is at the same height as the other windows and it is open to the floor. The upper part of the window is filled with casement sash as shown in the interior view. A full size double bed, without head or foot piece, is fitted into the opening, part indoors and partly



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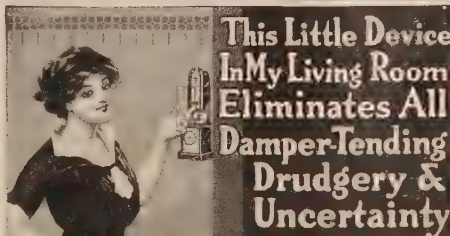
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out of doors on a platform built for the purpose of receiving it. A panel back the width of the opening fills the space between the casement sash and the bed. This panel back is on weights and pushes up to open the bed, the seat which is hinged, to cover the part of the bed remaining inside the room, having been folded up against the panel before raising it. This is seen in the cut where the bed is shown open. A series of hoods and awnings are so arranged as to be easily



Interior view, showing full-size double bed.

shifted to either the inside of the house or the outside, being controlled either from the room or from the bed. There is a weatherproof canopy which, except when the bed is in use, is on the outside and protects the bed against all kinds of weather. There is a second canopy filled with closely woven copper mesh screen. The copper wire mesh is not transparent as other screening. When the bed is occupied, the weatherproof canopy is thrown to the inside, protecting the room from the outside and conserving its heat, and the screened canopy is thrown to the outside. Between the two is a curtain or awning operated by cords from within the bed which gives protection against night showers and early morning sunshine.

A very simple exterior treatment is shown in the cut. Inside the room is seen the high casement sash and a seat with a paneled back under it, in the same finish as the rest of the room.



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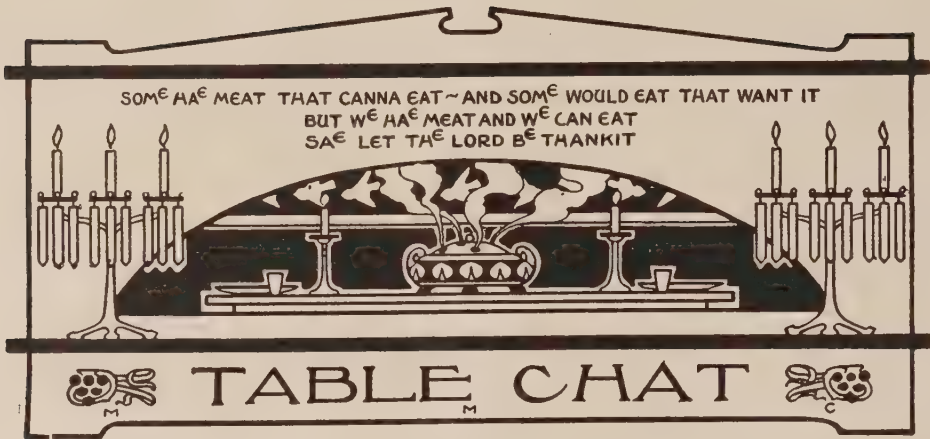
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The Christmas Message



CHRISTMAS comes this year to an anxious and troubled world, to a world filled with war and the rumors of war, and its message of peace and good will is the more insistent that it is so opposed to the trend of events. But the greater the suffering and disaster of the world, the greater the need for all the gentle ministrations of love. And so I hope that all of us may feel at this Christmastide the impulse to do our uttermost, not only to make our own happy, but to bring some touch of Christmas cheer to those who would otherwise be outside all the joys of the day.

Every one of us can do something. If we cannot send a dinner to a large, hungry family, we can see that some one woman, living alone, has her portion of delicate food, a card with our good wishes and a bit of Christmas greenery. Or we can see that some home-

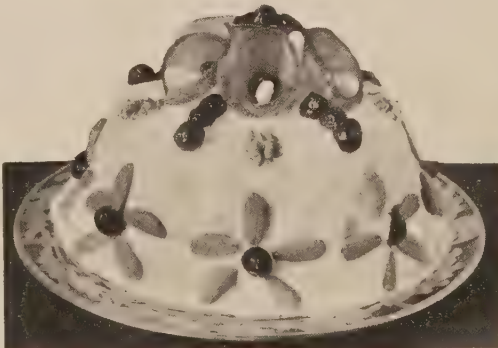
less man or boy has a substantial dinner at our expense.

When it comes to the matter of personal hospitality cannot many of us invite to our Christmas dinner someone who has either no friends to go to, or none accessible. The cities are full of such lonely men and women, and they are not wholly absent from country places. And their gratitude, while it may not be as loudly expressed as that of the washerwoman, is likely to be far more genuine.

And I should like to suggest, with such hospitality in mind, that dinner late in

the afternoon breaks the day far better than the midday meal.

Your guest will feel that he or she must not outstay their welcome, and many sad ghosts walk in the twilight hours of Christmas Day, which are laid in the midst of laughter and good cheer.



Decorated with candied fruits and nuts.

The Christmas Table.

One reason, I fancy, why there is not more of the sort of hospitality of which I have spoken, is that the idea of giving is so bound up with Christmas Day. You cannot well make a present of any consequence to a stranger, you cannot leave him out when others are receiving gifts. You can solve the difficulty in one of two ways; you can have at each place a favor of some sort, a fern in a little pot, an individual dish of sweets or nuts, a tiny calendar, or some similar trifle; or you can have in the middle of the table a very small Christmas tree, with a wreath of holly at its base. Have on it a gift for each member of the party, all of exactly the same value. You can get any number of pretty trifles at the ten cent store. Wrap each in vivid scarlet wrapping paper, not crepe paper, but the glazed sort, and seal it with a Christmas seal. Then, either just before the dessert is brought in, or at the very end of the dinner, light the candles on the tree and distribute the gifts with a little ceremony. The scarlet packages and the candles will be quite enough decoration for the tree, and the difficult problem will be nicely solved, the family having had their gifts privately earlier in the day.

A Christmas Dinner Out of the Common.

With poultry high and still soaring, why not try an old fashioned English Christmas dinner of roast beef and plum pudding? Here is a menu, which may help someone:

Oysters on the half-shell		
Roast beef	Yorkshire pudding	
Potatoes	Braised onions	Celery
Vegetable salad		
Sauce tartare	Baking powder biscuit	
Plum pudding		
Coffee	Crackers	
Cheese		

With the oysters serve delicate sandwiches of brown bread and butter. Five to a person is enough to allow. In the centre of each plate set a cocktail glass, containing a mixture of tomato catsup, Worcestershire sauce and a single drop of tabasco sauce, laying the usual points of lemon between the shells.

For a large party you should buy three ribs of beef. If pater familias is not an expert carver, have the roast boned and



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For the many valuable suggestions you can receive from the plans, editorial matter and advertising in every issue of the National Builder.

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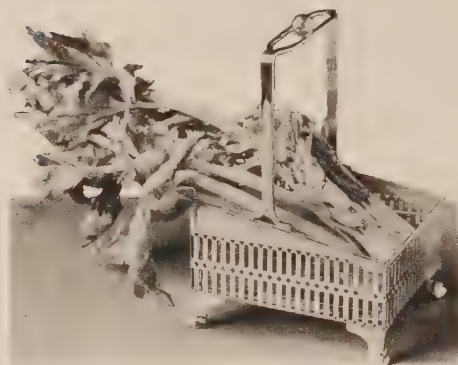
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rolled, as it is so much more easily man-
aged.

Yorkshire pudding is not common with us, but it is extremely good, and very simple. To a pint of milk allow four tablespoonfuls of flour, a teaspoonful of baking powder and half a teaspoonful of salt and one egg. Half an hour before the roast is done, take it from the oven and put something across the top of the pan to



A celery basket.

support it and keep it from the bottom. Half of an old gridiron will answer, some skewers, or even three sticks. Replace the meat, pour the batter into the pan, right into the dripping, and let it bake brown but not scorch. Cut it into squares and arrange them around the meat on the platter. The potatoes must be mashed and well buttered, as you cannot have Yorkshire pudding and a made gravy.

The plum pudding should be sweetened with a mixture of the darkest brown

sugar obtainable and syrup; it should be mixed so as to be rather soft when cooked, about the consistency of pound-cake, and only enough crumbs and flour should be used to hold the fruit together. Use twice the quantity of raisins that you do of currants and do not forget a little candied orange peel. Many a plum pudding has been spoiled for the lack of salt, and most of the rules give an absurdly large number of eggs. Three is quite enough for a large pudding, and it does no harm to add a teaspoonful of baking powder.

For the hard sauce cream two tablespoonfuls of butter, beat in two of powdered sugar, add a few drops of hot water, then more sugar, till it is stiff enough, beating it hard with a stiff spoon till it is white and creamy. Pile it in a glass dish and pour over it two tablespoonfuls of sherry or brandy.

In serving the pudding have it turned out onto a dinner plate and set this into a larger plate or chop dish, with a wreath of holly on it. If you wish to have it very picturesque, pour some brandy around the pudding and set it on fire just as it is brought to the table.

Preserved Ginger Cake.

A cake which is unusual, and is very good, is made with two eggs, five ounces of flour, a quarter of a pound of powdered sugar,* a tablespoonful of milk, a teaspoonful of baking powder and a little bitter almond flavor, with the addition of two ounces of preserved ginger, carefully washed to remove the syrup. Bake it in a moderate oven and when cold, cover with white icing mixed with shreds of crystallized ginger, or decorate with candied fruit and nuts.

If there is any syrup left in the jar of ginger, the cake can be used for a pudding. Omit the icing and serve it hot. Bring a cupful of the syrup to the boil, thicken it with a teaspoonful of arrowroot, add a good lump of butter and pour it around the cake.

A Silver Celery Basket.

Celery is always awkward to serve. No dish is just right for it. The silver basket for celery is rather novel, and solves the problem nicely. It can also be used for olives or small pickles.



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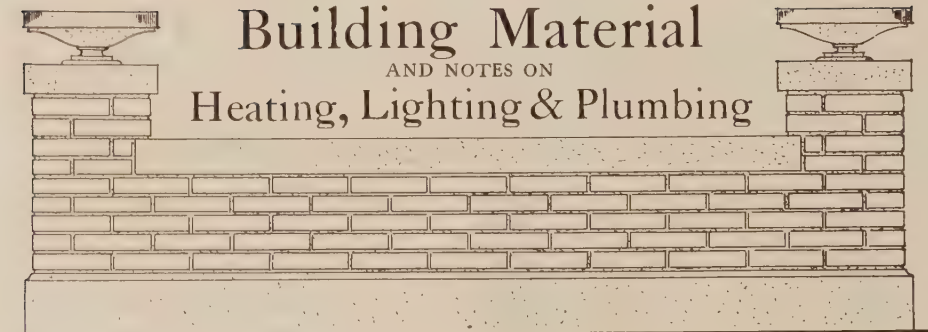
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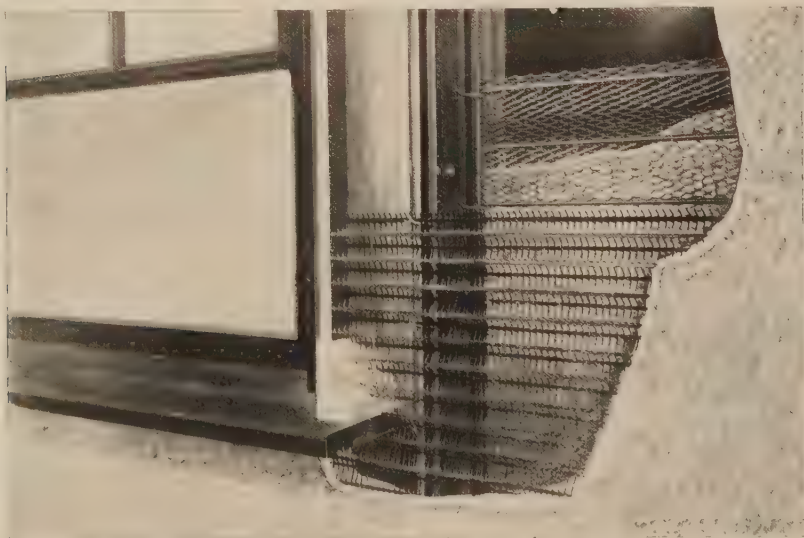


TYPE of steel and concrete construction which is entirely practicable for the small residence and yet which could be erected at a reasonable figure is a proposition which has just been developed. It is a problem on which much thought has been expended and which has now taken definite form, and the originators are now ready, as they say, to tell the building trade and those interested in home building how it may be done.

In order to put the matter in definite

and practical shape two houses—a typical bungalow and a two-story, eight-room house—have been built, both of which claim to be absolutely fireproof. Since their completion these have been thrown open to the public for examination and inspection.

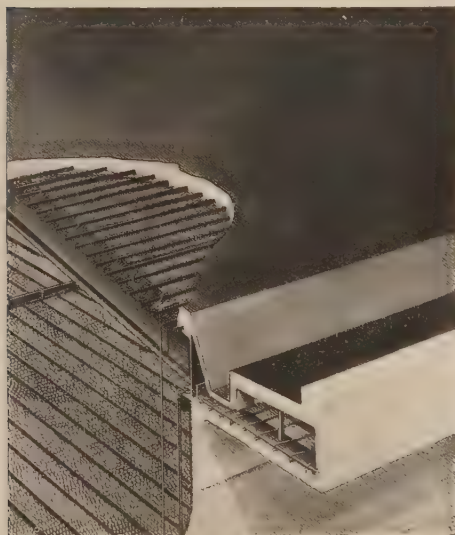
New building materials, a combined reinforcing and centering, and a deeply corrugated expanded steel sheet, a reinforcement which will hold in place two inches of concrete, have been developed to meet the needs of this construction.



Concrete removed from outside to show construction around window frame.

These are used over a steel framework not unlike a sky scraper construction, which is imbedded in the concrete foundations, and must be properly braced.

The foundations do not differ from the usual good, waterproof, concrete foundation walls, in which the steel frame work for the superstructure is set. The side walls consist of an outer two inches of reinforced, waterproofed concrete, and an inner three-quarters of an inch of reinforced concrete. The floors and ceilings are of the same reinforcement as the inner



Showing roof, suspended ceiling and gutter.

surface of the side walls. At their junction is an expanded metal angle which makes the bond complete between floor and ceilings and the wall. Heating and plumbing conduits are arranged for in setting walls and floors.

Side Wall.

The cut shows a bit of wall around a window showing the construction around the frame. A channel holds the window frame in place. The deeply corrugated reinforcement, trussit, as it is called, is wired to the steel frame of the structure. The scratch coat of cement plaster is first applied outside, then back plastered before the second coat is applied to the outside. The outside wall is made waterproof and given the finished coat, as with any kind of a stuccoed house. On the

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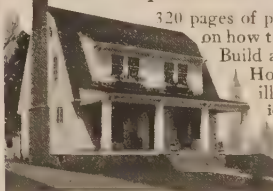
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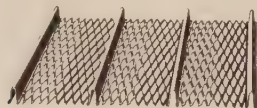
THE one certain way to reduce coal bills $\frac{1}{2}$ to $\frac{2}{3}$ is by using a Williamson Improved New-Fed Underfeed Furnace or Boiler. With the Underfeed coal is fed from below. All the fire is on top, causing perfect combustion. Smoke and gases are burned up, making more heat with no smoke, smell, clinkers, and very little ashes—you can use cheap slack soft coal or pea and buckwheat hard coal and secure same heat as with highest priced coal. Write for facts. If you want to save from 1-2 to 2-3 of your coal bill, get our wonderfully instructive book entitled "From Overfed to Underfeed."

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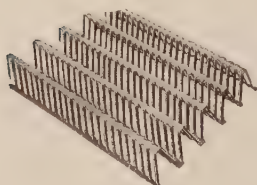
456 Fifth Avenue

Cincinnati, Ohio

inner side of the frame a self-centered reinforcement is also wired. A cut of these materials is shown elsewhere. That used on the inner wall, self-sentering, as it is called, has a heavy rib which gives it strength and rigidity, with a diamond mesh fabric affording a bond for the concrete and plaster.



Self-sentering.



Trussit.

Floors and Ceilings.

The floors are formed by two and a half inches of concrete laid on top of self-centering, over I-beams. Over the concrete is placed a non-combustible, sanitary composition flooring one-half inch in thickness, which is carried up to form a base about the room. Sleepers may be laid before the concrete is poured so that wood floors can be laid if desired. The ceilings are similar to the side wall.

Partitions.

The partitions are two inches of solid cement reinforcement. They are formed by wiring the deeply corrugated trussit to the self-centering of the ceiling and

floors by means of a metal angle, before any cement has been put on, so that the surface is continuous. The trussit is then plastered on both sides to make a two-inch partition. Tests which have been made show that ordinary tones of voice can not be heard through such a partition; that it is perhaps less of a conductor of sound than the ordinary partition.

Roof.

A cut of the roof is also shown, giving details of the construction of the gutter. Two and a half inches of concrete over the reinforcement is protected by a waterproof compound, sufficiently elastic to take care of contraction and expansion and keeping a waterproof film over the concrete. The ceiling is suspended from the roof by hangers.

Stairway.

The stairway with this construction is of concrete and steel.

The concrete for the entire stairway may be poured at one time. The self-centering can then be back plastered.

The newel posts and railings are constructed of channels and metal lath. Posts are poured solid inside a metal lath form and plastered outside.

Interior Trim.

The small amount of trim required may be of wood or metal, fastened by screws. Details of this nature can be adapted by the builder without affecting the fireproof qualities of the structure.

Many adaptations of the construction are possible, both as to the materials used and as to the character of the structure. The house can be built with wood timbers framed together and thoroughly braced, and reinforced stucco for outside walls and cement plastered inside, with reinforced partitions and ceilings, concrete floors and roofs. Brick walls with metal lath inside walls, with the same interior, or stucco on hollow tile may be used for the outside walls.

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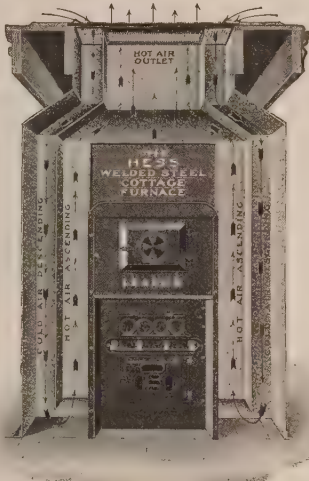
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WOODS

AND

HOW TO USE THEM



EDITOR'S NOTE.—When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH'S staff of wood experts.

This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

College of Forestry.

THE University of Washington offers students four distinct lines of work in its College of Forestry. This college, like any technical school, is for the purpose of giving to the industry things which can only be gained by an intensive study, and also to prepare men who are well fitted, after acquiring a practical knowledge, to take a place of value to the industry.

The courses presented at Seattle are:

(1) Federal state forestry work; (2) logging engineering; (3) forest products, and (4) the lumber business. The latter is a new course and is being elected by a large per cent of the students.

The courses have recently been extended to cover five years. The first two years give the student a general training in mathematics, surveying, sciences, English, foreign language, and those elementary forestry subjects that are necessary in any line of forestry work. Students in each of the four groups take this first two years of general training and devote the last three years to specialization in the line that they select.

Opportunities along a great many lines are open to graduates of the third group, such as wood preservation, wood pulp manufacture, veneer and furniture manufacture, wood pipe construction, inspection of wood products (especially structural materials), and numerous other branches of work concerning the lesser wood-using industries.

In addition to the regular course a

short course is offered each year, beginning immediately after the Christmas holidays and continuing for twelve weeks. This course is arranged to meet the special needs of men engaged in forest service work, timberland owners and lumbermen engaged in woods work. The course is divided into two groups, (1) the ranger group, and (2) the lumberman's group.

At Syracuse.

The New York State College of Forestry at Syracuse opened this year with a registration of 274 men, who are taking the four and five year professional courses in forestry. In addition to these men there are eighteen who are taking the one year practical course at the State Ranger School at Wanakena.

The professor of forestry utilization, Nelson C. Brown, made a 6,000-mile trip during the summer, visiting lumbermen and loggers in the Pacific northwest, where he studied methods of utilizing and protecting timber in practically all of the timber states of the west, bringing back illustrative material for use in the school and for the forest museum.

Yale Post Graduate Work.

The Yale students of forestry went down into the Vredenburgh timber holdings at Vredenburgh, Alabama, for their post graduate course in forestry engineering. The conditions are considered very favorable for student work. There are about 30,000 acres of timberland in these holdings so situated as to give the stu-

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Bury the Garbage Receiver in your back yard close to the kitchen. It
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The only part exposed is the top and
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To empty contents simply take off the
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dents excellent opportunities to make their studies and investigations under the most favorable conditions. The manufacturing plant has a daily output of 100,000 feet and the climatic conditions in that section are especially favorable to the out-door work of the class.

Professor R. C. Bryant is in charge of the forestry school at Yale, and made a personal visit before selecting the location for the class work. The special course consists of estimating timber, studying logging conditions, milling conditions, and in general, the working conditions of the industry.

Wall Paper a By-Product from Waste Bark.

The effort to find a use for by-products which otherwise are waste materials seems to have achieved another success in the manufacture of a wall covering not unlike the "oat-meal" wall papers now in use.

The sample made at the laboratory is a beautiful brown, slightly touched with the tiny stray filmlets of white. The paper possesses a stiffness which would make handling easy, and altogether seems to be a most successful development.

A valuable property of this paper is that little dye is required to produce the proper tints. This is especially valuable at the present time when dyes are almost impossible to obtain, and if at all only in small quantities and at exceedingly high prices.

Bark which is removed from the logs at certain pulp mills at Oshkosh, Wis., is of no value for fuel, and as it pollutes the water it cannot be thrown into lakes and streams. Great quantities accumulate at the mills or must be disposed of at a considerable cost, and hence it is an economic waste.

A quantity of spruce bark was recently sent to the Forest Products Laboratory in Madison for tests as to its possible usefulness. Here it was ground and made into what closely resembles the "oatmeal" papers. Samples sent to paper dealers and manufacturers have aroused considerable interest and it seems possible that this bark which now is only a source

of expense may be utilized in the manufacture of a satisfactory commercial product.

Rosewood.

Like the aristocrat it is among fine woods, Rosewood has many claimants to relationship from the East Indies and other tropical localities—woods similar in character but inferior in appearance. The true Rosewood, however—deep, ruddy brown in color and richly figured with black resinous layers—hails from Brazil, the Rio de Janeiro and Bahia Provinces. In this wood color is the factor which determines its grade and costliness.

So rich and rosy in tone are some of the finer grades that a stain of any kind would be detrimental rather than enhancing the beauty of the finished wood.

Rosewood owes its beauty of figure to a resinous oil which is present to a degree very unusual in a hardwood—a constituent which makes the wood not only very hard to work, but which presents finishing difficulties as well. This resinous oil is prone to ooze or bleed and this fact must be dealt with in finishing the wood.

To Study Forest Problems.

Secretary Houston of the Department of Agriculture made an extensive tour of the national forests to find out for himself to what extent their timber, forage, water power, recreational and agricultural resources are being developed for the public under present methods and to make a study of the administrative problems of the forest service. He sought first-hand impressions of the conditions under which the forest service is working.

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SPLINTERS AND SHAVINGS

Careless Use of Electric Devices.



WHEN electric devices or appliances for household use are installed, it should be done under the supervision of some one who understands the installation, if it is not done by an expert. A warning has been issued to the public by a state fire marshal, against carelessness in the installation and the use of these appliances, as their abuse may cause more or less disastrous fires. He especially calls attention to the fact that the electric circuit should not be overloaded with irons, toasters, plate warmers, hair curlers, sewing and washing machines. Most of the fires occur not because of the use of these devices, but because when the current on the wire is increased there is added danger of melting the connections and starting a fire which is not discovered until it has made a good start in the woodwork.

Many fires are started from leaving electric irons standing upon the ironing board without turning off the current. A hair curler carelessly left upon a dresser for a few seconds may be sufficient to start a blaze, and a washing machine may be made dangerous if the wire connecting the plug with the main circuit is allowed to touch the metal, thus burning out the connection.

In one case an improperly installed electric plate warmer started a fire. Another report showed that an electric iron caused a disastrous blaze. The fire department does not complain of these devices themselves, as they are properly constructed and are an excellent means of reducing household drudgery, but in each case they should be installed by an expert, or at least more care should be used by the head of the household who does his own installing.

A recent tabulation of electrical appliances in household use at the present time gives a total of nearly six and a half million, with perhaps two million more which are not tabulated. Of the six and a half million devices tabulated, over

three millions are flatirons, easily leading the lists, with a little more than a million and a half electric fans taking second place. Vacuum cleaners and toasters are next on the list with between four and five hundred thousand in use. Over fourteen thousand electric ranges are in use according to this list, and at the end of the list comes electric dish washers, two hundred sixty-one in number.

Percentage of Home Owners.

In Seattle and Los Angeles forty-four per cent of the people own the houses they live in. In Philadelphia, Chicago and Saint Louis the percentage is approximately twenty-six. In Boston it is seventeen, in New York twelve.

"The Mystery of the Oriental Rug," by Dr. G. Griffin Lewis, is a monograph, including "The Prayer Rug" and "Some Advice to Purchasers of Oriental Rugs," published by the J. B. Lippincott Company, Philadelphia. The book has been published in response to the popular demand for a low-priced book on the subject. In this monograph the author has endeavored to present in a concise form certain facts that may enable the novice to more fully understand and appreciate the beauty and interest attached to these treasures of the Orient.

The second edition of "The Practical Book of Oriental Rugs," by Dr. G. Griffin Lewis, published by the J. B. Lippincott Company, Philadelphia, has appeared. This is a very complete and comprehensive survey of the subject, with many illustrations, twenty of which are in color. This book gives quite a complete classification, both from a geographical standpoint, as most rugs are named after the towns or districts in which they are made, or from the people who make them; and also a classification according to their intended uses. The chapter on identification of rugs, together with the chart showing the distinguishing features of the different rugs is of particular value. The information on the prominent characteristics and details of weaving, the detailed chapter on design, illustrated throughout with text cuts, thus enabling the reader to identify the different varieties by their patterns; and the price per square foot at which each variety is held by retail dealers, are features new in rug literature.

The book is full of interest and invaluable as a reference.

KEITH'S MAGAZINE

JANUARY

1916



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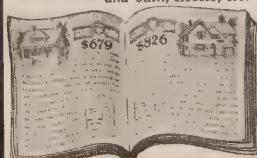
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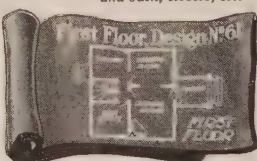
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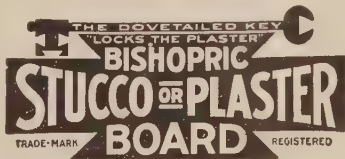
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(Continued on Page 5.)



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Photo by Mary H. Northend, Salem, Mass.



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ON HOME-BUILDING

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Just a Word

The Outlook for 1916.



THE business picture as it unfolds for us the fresh canvas chronicling the conditions which shall determine whether we are to build a house or put it off, is of far keener interest than the finished picture of the year just closing. Yet another look at last year's record, a re-reading of our last January editorial, shows that the word of encouragement held out to prospective builders at that time, was well justified.

It was a year ago that the first throbs of recovering business activity were felt, while today the business interests of the country, ranked in close formation, are marching forward under the pressure of ever-increasing industrial demands. How has building been affected? It has been greatly stimulated with the result that prices have already hardened and, before the season is out, will go higher. The demand so long forecasted is upon us and manufacturers will be the first to put up prices. We learn this week that a slight advance has already been made in the price of lumber, we shall have a rising market.

What are you going to do about that new home? Isn't this the year of years for you to tackle it? Many people have been a little more careful of their expenditures during the past year, and, with the same income, savings have thereby grown. Are they not now ready for just what has been needed to start "that new home"? Build a house and you will begin to experience a new delight, a pleasure in establishing something of permanent character. You will likewise increase your personal value to your community and fellowman. After all, there is something for us to take into account other than the return in dollars. Human interest lies in the home which is so potent a factor in character building that we must recognize its great influence over and above that of "interest" rates. Give sentiment a chance and you will find the sentiment of the home is so strong that it will override everything else. That is why it is possible for the savings of the toiler, even to a modest sum, to bring so large a return when put into a home. If you think about it, study the possibilities, the wish to have a home which you and yours can call your own, and the opportunities to get it, will grow.

KEITH'S, through 1916, will help you solve many of the situations confronting your desires, will assist you in shaping your ideas into concrete form and, it is hoped, will finally place before you the home of your desire. Should you not be a subscriber today, we would feel complimented to have your name enrolled and to be given the opportunity of bringing you the ever good tidings and enjoyment which come to all who plan to build.

KEITH'S MAGAZINE

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JANUARY, 1916

No. 1

The Hampstead Garden Suburb

Eleanor Allison Cummins



SHALL always think of the Garden Suburb less as an aggregation of streets and houses and churches, than as a stretch of grass-grown upland, swept by all the breezes of heaven, basking in summer sunshine, under the bluest of skies, with a vista of distant hills to the north and west, with shadowy woods to the east, and stretching away to the south the undulations of the heath. It is a place of wide roadways, sweeping about in gentle curves, of open squares gay with flowers, of houses, some dignified, some pictur-

esque, some almost homely, but none ugly, and all of them charming in their low tones of gray, buff and white cement, of red, gray and brown brick, and of reddish brown tiles.

The first impression of the estate is agreeable and its skyline is charming. You walk perhaps a quarter of a mile from the main thoroughfare, and ascend by two or three steps to a rose-hung pergola, at the entrance to the Meadway, as the main street, east and west, is called. On either side are two similar groups of



Irregularities are carefully calculated to avoid monotony.



Many houses have no projection except the eaves.

gray concrete houses, four to each group, their front lines curving inward, the facades being at four different angles. The sharply pointed gables, the projecting eaves, the long lines of the lofty roofs, the great space between the windows of one story and those of the next, the casements filled with leaded glass, the elevation of the houses on a low terrace, above retaining walls of grayish brown brick, the varying angles at which the doors of the different houses are set, the projecting bays of the end houses, all these are features typical of a considerable proportion of the houses in the suburb.

The general type of architecture is what we may call English Domestic, which derives from Queen Anne. It is diversified by emphasizing the angles of roofs, adding bay windows, porches and hooded dormers, by the almost universal use of casement windows and by the irregular disposition of door and window openings.

The arrangement of houses on three sides of a quadrangle is much in evidence, as few as four or five houses being grouped in this way, and it is certainly an effective disposition of a number of small houses, the long line of the rear giving an opportunity for picturesque groupings of doors and windows. It would be an

exaggeration to say that the backs of the houses are as ornamental as their faces, but a good deal of attention has been given to eliminating unsightliness, and where the backs of buildings are visible from the adjoining roads they are not noticeably different from their fronts. Certainly in no case is building material

of a different quality used for them.

In one mass of buildings, containing many small apartments of a single large living room and a tiny scullery, there is a central space of turf and flowers, the houses on all four sides, with entrance arches cut through the buildings at either end. I do not remember to have noticed more than once the crescent, the long curving lines of houses, which is so common a feature in English towns.

Everywhere are evidences of the attention given by English architects to the



Emphasizing the angles of the roof.

façade as a whole. The fronts of three or four adjacent houses are regarded not as four spaces but as one, and doors and windows are arranged with reference to the effect of the whole. Irregularities are carefully calculated, and are just enough to prevent the suggestion of monotonous repetition, but never carried to the point of eccentricity. The treatment of the combined fronts as a single unit saves the building from the finicky effect of the average row of small houses, makes wide gables and long roof lines possible, and enables the architect to

piazas, and their place is inadequately supplied by canvas canopies in the gardens. Still, it must be remembered that the English summer is never very hot, and that for at least nine months of the year all the light and sunshine available are needed in the house, and a broad piazza certainly subtracts a good deal of both.

To anyone who has an eye for architectural details, the suburb is full of interest. The houses seldom strike one as in any way unusual as far as outline or proportion are concerned, and eccentrici-



An archway is cut through the center of a block of houses.

place the chimneys, always an important feature in the English skyline, to the best advantage. One interesting feature is the disposition of the tradesmen's entrance. An archway is cut through the centre of the block, onto which the kitchens of the two central houses open, while a flagged walk at the rear leads to the others. The glimpse of greenery seen beyond the arched passage is an agreeable addition to the general effect.

An American is struck by the absence of piazzas. There are upstairs balconies in abundance, and sometimes the rooms on the shaded side of a house open with French windows onto a flat, bricked terrace, but there are no broad, shady

ties are few and far between, but everywhere one runs across little things which are distinctive and add greatly to the interest of the houses.

A large proportion are of cement. When the gray tone is used, what wood appears on the exterior will be the warm brown of walnut, rather than the dark, weathered tones so common with us. A weathered gray wood has been used in some houses with good effect, and the trimmings of the buff cement houses are apt to be of green, quite a bright, dark olive being much affected. One most effective house is absolutely white, the cement very rough, all the window casements with white sashes, even the door



The end houses, sharply gabled, are of brick.

white with iron trimmings, the one touch of color being a flutter of violet curtains.

In many of the cement houses there is practically no timbering and there is a considerable use of very narrow bricks, not more than an inch thick and of varying lengths. These set in squares at the corners of the walls, carefully graduated, form supporting brackets for projecting eaves and, closely set, edge door arches. They are also used for panels of herringbone, set into walls and to edge doorsteps of larger bricks.

The stone door step, whose careful whitening is a part of the daily ritual of all well regulated English houses, is not in evidence in the Garden Suburb. Its place is taken by brick, sometimes by tiles. A characteristic feature is the use for garden paths and front walks of irregular pieces of flagstone, laid in mortar. The greater number of the houses stand above the street level, and their front yards are enclosed by retaining walls of grayish brown brick. Few houses are without a hedge, planted above a low brick wall, and usually of privet, either the plain green or the golden sort, and always trimmed with the greatest precision.

The cement surface of the houses is usually rather smooth, but in a few cases it is exaggeratedly rough. In some of the houses the cement has been scored

with a tool either horizontally or longitudinally, giving a sort of brushed effect not unpleasing. A common feature in the cement houses, which have high windowless gables, is the insertion of some simple ornament in the peak, four crosses made with bricks, four square bricks symmetrically arranged, or some simple geometrical pattern, the bricks when projecting from the surface

being washed over with cement.

The brick houses are very many of them gray or brown, although dull red is used in many cases, and even exclusively in some sections of the estate. Gray brick is used for the central group of institute and churches, and is varied by patterns worked out in red brick. Many of the red brick houses are absolutely flat, having no projections whatever, except the eaves of the roof and a possible porch, and the needed relief is given by the insertion of panels of herringbone in red, or red and black bricks. The flat look is largely modified by the use of casements, opening out. The houses built of brown brick are usually trimmed with white wood, and of course in all the larger houses of the Queen Anne type the white wood trimmings are very conspicuous.

You have to see a place like this to realize the value of leaded glass windows. The small paned, wooden framed window looks clumsy in contrast with it, the large paned, modern window commonplace. Whether it is plain, in tiny panes, or its lines curve at the top into leaflike forms, or whether the plain glass is varied by the insertion, in a pane or two, of a bullseye, the leaded window is always delightful.

The combination of two materials is sometimes used, and a cement house will

have a brick lower story. In one block of houses the end houses, sharply gabled, are of red brick, while cement is used for the long, low centre houses.

One hardly sees at all the familiar timber and plaster gables, but in the newer houses there is a considerable use of gable ends filled in with weatherboarding, of some hard wood, probably oak, weathered gray. Vivid red tiles are pleasantly absent, the prevalent tone for the roof being reddish brown, while very occasionally a slated roof is seen, usually in the same reddish tone.

The Garden Suburb is well named, for in the summer months it is a blaze of brilliant color, while there is even in winter an abundance of evergreen foliage. Many of the houses are creeper covered, some of them when built having a trelliswork securely fastened to the whole front of the house. One may wish that the gardening behind the hedges were a little less particolored, but a confusion of homely flowers in brilliant bloom is surely to be preferred to the smug regularity of carpet bedding, and now and then one finds masses of a single color to rejoice one's soul. And everywhere one sees the most beautiful flat beds of English ivy, vividly green, and prospering as it never can in our climate of extremes.

Two circumstances have been advantageous to the development of the Garden Suburb along artistic lines: first, the restriction as to acreage, allowing the building of a limited number of houses on a given area of land; secondly, the co-operation of a number of companies, in the

building of the rented houses, each employing its own architects, who have naturally, each working according to his own ideas, redeemed the settlement from the painful monotony common to most places of its sort.

Considered as an investment the Suburb has been highly successful, paying its stockholders, who are also tenants, about four and a half per cent upon their investment, as well as a dividend of nearly as much more. It meets the needs of a



Chimneys are always an important factor in the English skyline.

large class, as its rents range from about five dollars a month for a combined living room with a scullery, to perhaps seven hundred and fifty dollars a year for a large house. The club has something like five hundred members, and the institute provides all sorts of interests in the way of concerts, lectures, classes and an excellent library. An Anglican and a Nonconformist church, a kindergarten, elementary and secondary schools, and shops, all go to the making of a prosperous and self-contained community, whose original idea is being adopted in many places, all over England.

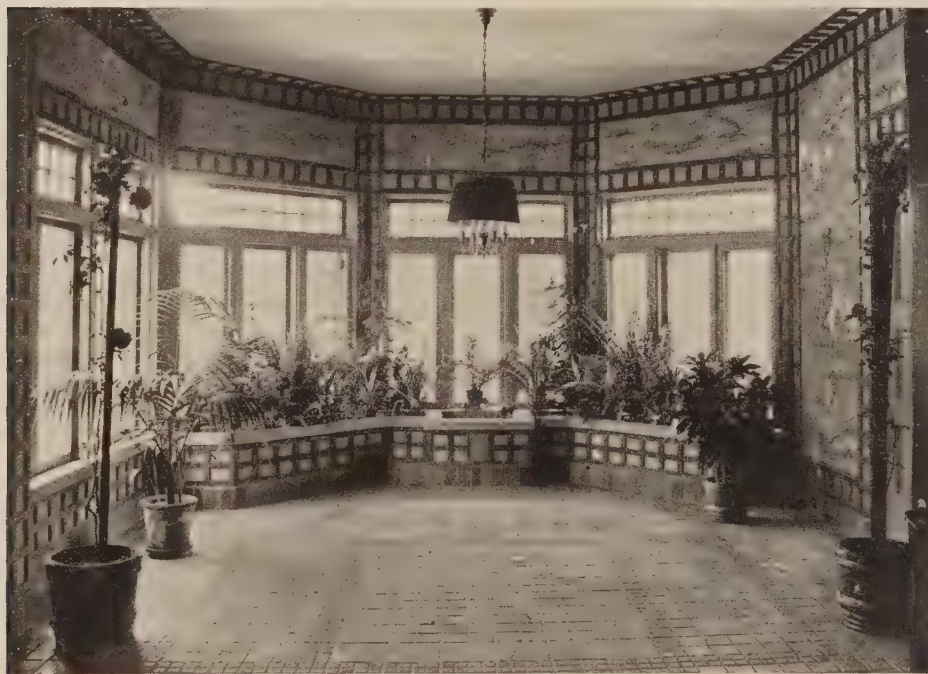
A Sun Room

Margaret Craig



THE modern sun room which may also serve as a breakfast room is receiving an abundance of attention nowadays. It has furnished an opportunity for the expression of originality and beauty, to the decorator as well as to the architect, because an in-

The decorator shows fine feeling in the design of this room. Her idea was to incorporate as far as possible a woodsy atmosphere. The lattice work, stained a delicate green, bounds the panels, that form the dominant scheme of color, and serve as door and window trim. Miss



As a breakfast room it is an inspiration for the day's work.

finite amount of latitude can be shown, that would not be permissible in more formal rooms.

In the accompanying photographs, the room pictured contains some interesting features, that are very appropriate to a room that forms a setting for the early morning half-hour, and which should be an inspiration for the day's work.

Helen Gatch, the decorator, in the conception of this room, has achieved something distinctive and very charming.

The vertical panels are composed of peacocks resting in the branches of cypress trees, embowered by large clusters of yellow wistaria and lavender lilacs.

The principal panels were formed by pasting flowers, peacocks, and tree

branches cut from French wall paper, on wall backgrounds painted fawn color.

The end of the room, opposite the dining room, is devoted to a semi-circular group of casement windows, that open above a built-in yellow cement trough filled with growing ferns and various plants. A fountain in the central division of this inner window box plays into a pool that contains gold fish.

The lattice work is carried around this



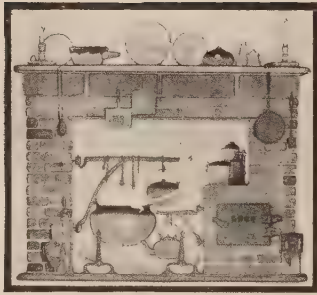
Vertical panels of peacock and wistaria.

cement box, and forms a frieze above the single row of tiling that forms the base of the room. The floor is laid in Batchelder tiles that correspond in color to the soft dull blues, tans and yellows that appear in the peacocks' plumage.

A room such as this can be used in summer and winter, especially in sunny California, as the windows can be opened to the breezes, or closed to keep in the heat.



The lattice serves as door and window trim.



THE KITCHEN



Organization of the Housework and the Butler's Pantry

Edith M. Jones

(Copyright, 1915, by Edith M. Jones)

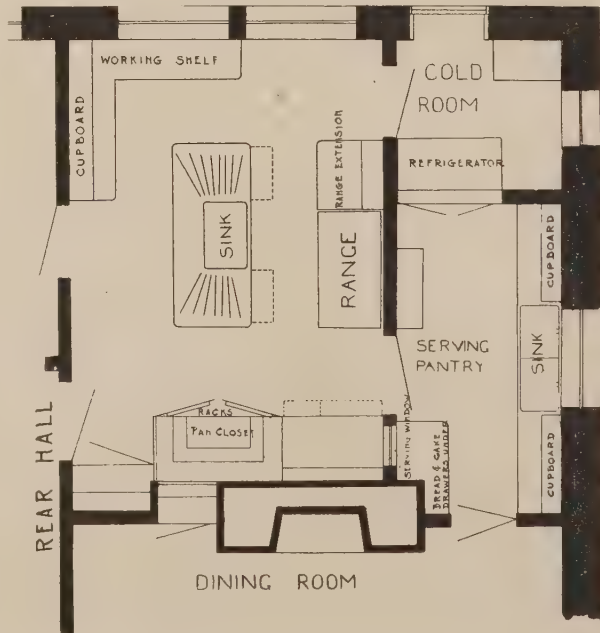
SYSTEM and organization are the wonder workers of the successful business of today. A well-planned organization and a carefully chosen system are absolutely necessary for any business whether that business requires one man or a thousand.

The careful housing of this organization means efficiency and the successful system installed means conservation along every line.

In other words, "conservation and efficiency"—the slogans of modern business methods—are the *fruits of organization and system.*

Men and women are engaged in many different kinds of business, but, as someone has truly said, "Every profession or business is tributary to home-making." Thus the home is the greatest organization on earth and house-keeping is the greatest business there is in the world today. Practically all business (with the possible exception

of the making of munitions of war, and that primarily is for the protection of the home), all business contributes to and is itself dependent on the home. Its success depends upon the organization and system of the individual housewife and the suc-



cessful housing of this organization determines the efficiency and conservation obtained.

"The kitchen must be under as efficient a system as has been found indispensable in the modern factory," says Frederick A. Osborne of the University of Washington. He also says, "By paying attention to her movements the housewife can easily save 25% of her energy, and miles of unnecessary steps can be eliminated by careful attention to the arrangement of furniture and utensils and the organization of movements."

The successful business man of today is eager for the new methods and quickly adopts the advice and reports of the "efficiency man."

One rarely hears a man say he can get along without any of these "new-fangled notions." But women are more conservative and very apt to regard their housekeeping as "Mother used to do it," as



Dishes are washed in the pantry.

being quite good selves. It is curious that in housekeeping alone, they hold to the traditions of an older time.

A girl who has been employed in an office before her marriage, who has kept everything there in a systematic, closely related order, and so has done most efficient work, seldom thinks it is possible to follow the same ideas in her kitchen after her marriage.

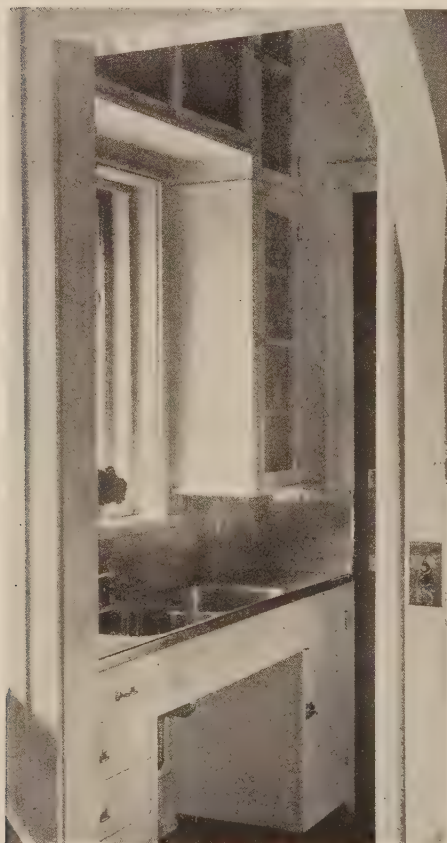
There is little reason to doubt if she fitted up her kitchen and ran her home on the same business principles that she previously employed in her office she would develop into the best kind of a housekeeper and find her work in her kitchen quite as interesting and absorbing as the work at her desk in the business world, and the results would be as satisfactory in the home as they have proven in the business world.

In studying business methods we quickly discover that *confusion* and *congestion* are two

things that must be avoided in any kind of business.

Butler's Pantry in the Small House

Housekeeping is no exception and it is with this in mind I want to point out the advantages of the Butler's pantry in even the small-sized house. The floor plan given



The double compartment sink.

before is almost an ideal arrangement. The kitchen is very compact and especially well arranged but the Butler's pantry has proven itself the greatest joy.

As you see, the distance between kitchen and dining room is but a few steps. The dishes from the dining room are never taken further than the pantry, where they are washed and put in the cupboards without a single needless step. The *double-*

compartment sink allows one part to serve as a dishpan and the other compartment as a draining pan. The ample drain boards are valuable not alone for dish-washing but are of the greatest help in affording a place for foods before they are served and a place to put accumulated dirty dishes during the process of serving the meal. Congestion more than any other cause is responsible for much dish breakage, and confusion more than any other one thing is responsible for much of the dreaded weariness which often comes to the worker. The extra working table surface of the Butler's pantry, in that it separates the *preparation* and *clearing processes*, is therefore of great value.

Then the refrigerator opening into the Butler's pantry is another valuable part of this plan. The icing is done from the rear service porch and drainage is provided. The refrigerator stands up from the floor so that the food chambers are approached *without stooping*. One can readily see the value of this placing of the refrigerator. Cream, butter and left-over foods can be put in the box directly from table. Salads and cold foods can be kept in the box and can be easily served at meal time, at the same time the refrigerator is also convenient to the kitchen.

A serving window opens from kitchen into pantry. The hot foods can all be put through window onto working shelf of the Butler's pantry beside dining room door. This saves many steps and foods do not lose heat. Under this working shelf of pantry are the cake and bread drawers. This conserves the working table top, which is of great importance.

These Butler's pantries can be very simple or very elaborate, according to the wishes of the housewife, but in any case a small, compact kitchen, where the foods are prepared and a Butler's pantry where clearing process is done, is the rational distribution of the kitchen activities and cares for the system and organization with the greatest efficiency and conservation.

Remodeling the House



FEW city houses are living up to their possibilities and country houses often fall short of them. Few have attained the maximum of harmony with all the needs of the owners: need of comfort, convenience, pleasure and usefulness. It is here that remodel-

talities find expression in the old Kentucky home, pictured here; the rebuilding of which included decorations and furnishings, as well as the planting, drives, gardens and greenhouses. Remodeling the estate as well as the house gives a great opportunity and advantage has been



Generous hospitality finds expression in this old Kentucky home.

ing, like the touch of a fairy wand, can do wonders. After a house has been lived in for a while, it begins to reveal limitations; certain rooms somehow do not give the satisfaction that was anticipated; others, through family changes, have ceased to be needed for their old service, but offer possibilities of greater usefulness for some other purpose and their present half service, is decidedly unsatisfying.

Perhaps no type of building lends itself so well to the remodeled job as the Colonial. Graciousness and generous hospi-

tality of every possibility of situation and environment.

In many houses, with their generous supply of rooms, the master of the house often feels the need of "a little room" all his own, where he can be alone when he wants to be, to think things out; to do some bit of extra work, write letters, and be absolutely free from intrusion, that is impossible in his large library. He wants a room that is simple, comfortable, made just to fit him and to fit his needs.

A hobby room in a home has suggestions of appeal to the man who is inter-

ested in any of the dozens of collections that require special drawers, cabinets or tables for the greatest amount of ease and convenience.

A book room may be much more intimate in plan and arrangement than is found in the usual library. The book room illustrated claims a strong touch of dignity in the Elizabethan ceiling, treated in old ivory tones. The hangings and portieres harmonize pleasingly, not only

the porch or lawn, has been one of the pleasant memories of the summer in the country home. When the family remain in the city or before and following the summer exodus they are not satisfied with indoors eating so a breakfast porch is built overlooking the garden at the back of the house. Enclosed in glass and heated during the winter they have a delightful conservatory or sun parlor.

Where there are children in the home,



The great hall lends itself to a charming Colonial treatment.

with the woodwork but with the rich leather binding of the books on the shelves.

The mistress of the home often feels the necessity of transforming her kitchen so that she may obviate many inconveniences that have grown into real problems. Her practical experience shows her what is needed and the growing thought on the domestic sciences gives her the aid of expert council and suggestions by which she may be able to convert her dream of what a kitchen might be, into a veritable reality which is a joy.

The delight of eating out of doors, on

with their susceptibility to diseases contagious in their character and demanding isolation, one room on an upper floor might be transformed into a nursery or home hospital. Bright, cheerful, simple in furnishing and sanitary in all its appointments, this would keep a sick child within the home but absolutely apart under ideal conditions. Here absolute quiet could be secured, with no restriction on the play of the children in other parts of the house. A children's combination play room and gymnasium, with a compressed cork flooring, deadening noise and soft to the tread, special closet room ingen-



The book room with Elizabethan ceiling.

iously planned to hold all the toys and perfectly adapted to the limitations of the little legs and arms of the child tenants, with space and facility for the utmost freedom in play and exercise, should prove an attractive addition to the house.

An attic or upper-floor now little used,

rebuilt in iron and glass, has infinite possibilities as a solarium and heated for winter use, would furnish a delightful addition to the city home. With its hardwood floor, rugs, palms and easy chairs, it makes a charming place for entertaining and gives a cozy unconventional atmos-



A music room is often the object in remodeling.

phere which is different from other rooms. In giving the pleasure of growing things the present city house fails of its possibilities oftentimes; partly because as an unnecessary expense it was not included in the original planning; partly because the care becomes onerous to those to whom the pleasure of growing things

house is another motive for remodeling a room. Some provision may have been made for the music room in the original planning but often the organ is simply built into a convenient space, where other musical instruments may be grouped about it and thus the music room grows into its place.



The comfort of green growing things in the winter season.

is a luxury rather than a necessity. The conservatory is one of the luxuries which modern day conveniences have made possible to the person of moderate means. In the modern conservatory a bit of summer is held captive; here one may have the pleasant warmth of the sun and the "comfort of green growing things" through the bleak winter months.

The building of a pipe organ into the

Remodeling a city house means fitting it to the individual needs of the owner and his family after living in it for some time has gradually revealed those needs. Thus the remodeled house often gives an equal or even greater success and satisfaction than a new house which may in turn reveal the inadequacy which can only be discovered by being at home in the house.

Concerning Home

"Home is the place where the heart is" but how much more will the heart be in the home if the little place has been builded according to the heart's fond plans? How much more attractive will even the simplest home be if the little house carries out the ideals that the heart has loved, the choice hopes and rare desires that have been sacrificed for, worked for, shared with others in the little building?—*Evelyn M. Watson.*

How a Dream-Bungalow Became a Reality

M. C. Johnson

A Building Experience by One of Keith's Readers



HY should not the school teacher in the boarding house satisfy her desire to have a home of her own?

This question kept recurring to her mind until there seemed to be no good reason against it excepting lack of funds. She set about seeking a remedy so vigorously, that sooner than she could have dreamed it possible, the home was her proud possession. Denying herself what had seemed to be necessities became interesting when she could picture the joy of a home of her very own.

When she had saved up pennies enough to buy a lot, she asked a reliable real estate dealer to be on the lookout for

a bargain, and before many days he put an irresistible temptation before her. It was a lot in a newly opened part of Seattle, with a glorious view of lake and mountains. The lot had to be sacrificed in two days to meet a mortgage. She went, saw, was conquered and before night the lot was hers at a low price for such a beautiful location. With the money thus saved she negotiated a loan, with the balance to be paid monthly.

Fortune again favored her daring in a few days. The lot had a precipitous slope towards the back. She had been planning to study up on cliff dwellers, thinking the price of filling would be pro-



The exterior is of shingles stained brown.

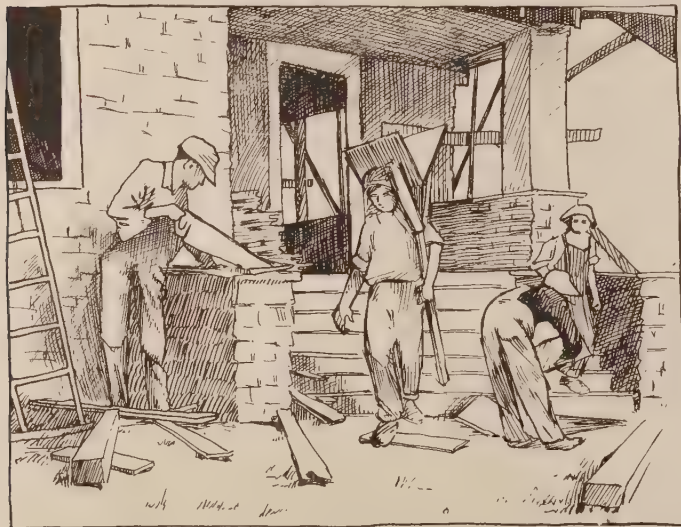
hibitive, when the city began grading the neighboring streets and the workmen requested the privilege of dumping earth into her ravine. She soon had a beautifully sloping lot, with the front one foot above street level, with a terrace midway, so that the basement door leads out on a level with the back yard. The back boundary has a five foot wall with ivy and trailing vines growing over it.

with eight boys, from 14 to 18 years old, were on hand with pick axes and shovels, to make the excavation. The second day this was ready for the cement foundation.

They selected native material as far as possible. The original plan called for three rooms and bath room, with attic above and basement under the back half of the house. But after the frame work was up, this seemed like such a waste of

good space, that they concluded to finish the upper story. Even after two rooms and two sleeping porches were partitioned off, it was decided to utilize the corners under the roof. These made a roomy, built-in dresser, a closet and two spaces where screens and trunks and boxes galore are stored.

The boys spent a strenuous but happy summer. Eight were chosen from a long list of applicants, on account of the skill



The boys spent a strenuous but happy summer.

For years she had been studying plans and building-magazines, so the castle in the air had assumed rather definite shape. She took her dream-plan to a contractor, who pronounced it practicable. The Manual Training Department in her school heard of this, offered to build her bungalow, convinced her that it was possible, and in a few days the contract was theirs. She had occasional misgivings and visions of a boy-built home collapsing over her head. But the boys went at the preliminaries in such a business-like way that her doubts vanished. The working plans and specifications were made during the last three weeks of school and the day that school was out the instructor

which they had shown in their school shop work. They were paid by the day and received school credit for a semester's work. The owner was camping on a nearby island, but often came in to watch the progress of the dream-bungalow quickly becoming a reality. When she happened in at noon, the boys were making a merry picnic with their lunches brought from home.

The exterior of the bungalow is of cedar shingles stained brown with green roof. The windows are casements opening out. There is a small porch at the front and a fine, roomy porch across the entire back of the house, for it is from this side that the view is so glorious. She plans to

have this porch enclosed in screens in summer and with glass in the winter. It will make a beautiful sun room.

Native fir is used for the interior for everything excepting the living room floor, which is of quartered oak. The kitchen and bath room have white enameled wood-work with blue and white linoleum on the floors. Native fir, stained the shade of the oak floor, makes very satisfactory flooring and is used for the rest of the rooms.

The living room is 13x24. One end of it has a folding oak table and is used for a dining room. A large square window with a casement window on each side is in the south wall. This forms a frame for a wonderful picture, with snow-covered Mt. Rainier for a center. Even when clouds cover the glorious mountain, the wooded foothills and beautiful



A small porch in front and a wide one for the view from the rear.

Lake Washington are always visible.

A boy of 16 built the chimney, in the center of the house, with the living room fireplace, which draws perfectly. At one side of this is a built-in bookcase, at the other side the staircase begins with three steps. These are hinged and when drawn back they reveal an ample wood box or can even serve for a "safe deposit vault." Above the landing the stairs lead up be-



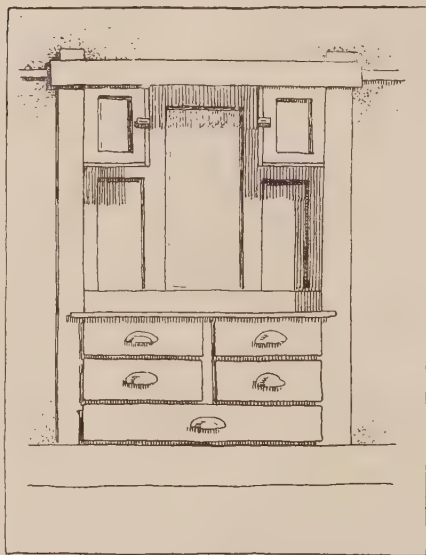
Fireplace with book case and "safe deposit."

hind the chimney into a small hall, which opens into the two bed rooms, one on each side of the house. The sleeping porches are at the front and the back, with dormer windows.

The basement contains laundry tubs, a hot water heater and a partitioned space for coal and wood.

The summer's work was a complete success. The boys received splendid practical training and completed a neat little

home that is workable and livable in every way. The question of furniture was



A built-in dresser.

simplified by all the built-in contrivances. To say that the woman who moved into her longed-for home, the week that school began, was happy, would be a very mild expression. In addition to her own joy, she gives a fellow teacher a pleasant home and still has room for a homeless student who assists in the work.

Every spare moment is now being spent in beautifying the yard, which is rapidly becoming a

fitting setting for the dream-bungalow which became a reality.

Homes of Individuality

Selected by W. J. Keith, Architect

A Home You Are Proud to Own

A NOT unpardonable vanity attaches itself to the house to which we carry the latch key. In case we also own the house the feeling is appreciably stronger. This feeling has had much to do with the houses that clamor for attention. As the feeling for good design has increased and the taste is simpler, the dignified, substantial house makes an appeal to the home-builder.

The entrance at the side gives more available space in one unit in the plan as well as allowing a wide unbroken lawn.

In this plan the enclosed portico gives entrance to the hall or a direct entrance to the living room if desired. A wide-

columned entrance connects the hall and living room. Under the stairs, opening from the hall, is a lavatory and toilet. At the other end of the hall a door opens to the service part of the house, the kitchen, rear and basement stairs.

The fireplace makes the chief feature of the large living room, which extends across the front of the house. It is 15 by 27 feet, really a large room. A triple group of windows fills the center of the space, making a feature of the exterior with a smaller group on the second floor. Beyond the hall is the dining room with a wide-cased opening, and still beyond that is the sun porch, ending the vista from the hall.

Between the dining room and the

kitchen is a roomy pantry with a wide work-shelf with bins and drawers under. Cupboards fill the available wall space. The kitchen has easy communication both with the rear stairs and the basement. The entry gives good room for the refrigerator, where in extremely cold weather it may be possible to get along without ice if desired.

The stairs connect the finish of the main hall with that of the upper hall. The finish of the second floor is white enamel. The mahogany rail of the stairs and white spindles carry this to the mahogany finish of the lower hall.

The finish of the entire house is very simple in line. The natural surface of the wood is stained only enough to give

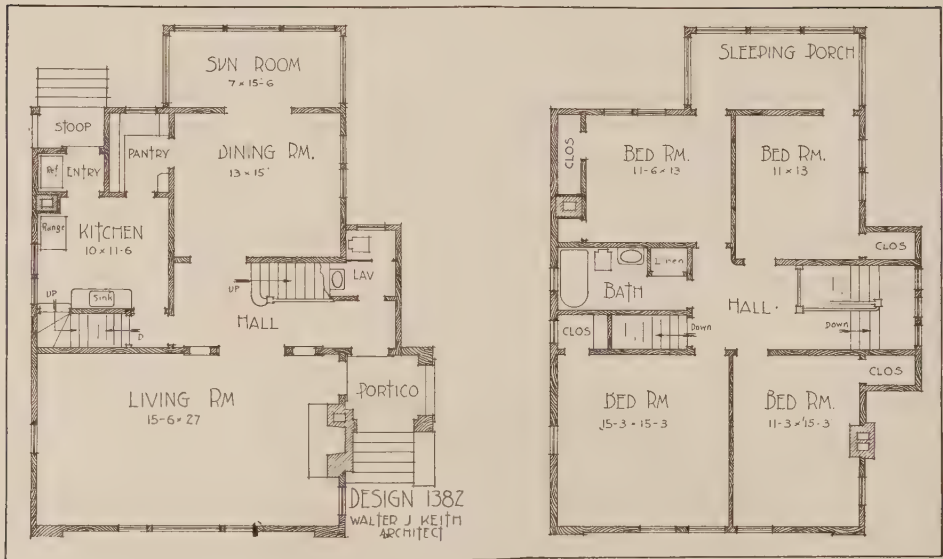


A dignified, substantial house makes an appeal to the home-builder.

On the second floor are four bedrooms which, as houses are built nowadays, are all large rooms. When a bedroom is more than fifteen feet square we admit that it is large, and 11 by 13 gives very good accommodations. All of the rooms have large closets, and the generosity of the closet space in one of the rear bedrooms is quite unusual. A sleeping porch opens from either or both of the two rear bedrooms; an ideal arrangement for the family rooms. In the bathroom is a good linen cupboard. A door closes off the service stairs.

a good color tone in keeping with the color scheme of the interior. Simplicity is the keynote of the house. The finish of the dining room and sun porch may vary slightly in treatment, but the same simplicity of line is kept. The hall sets the key and connects the treatment of the other rooms and at the same time carries it to the second floor. Here, as is often the case, a daintier or more personal color scheme is carried through the sleeping rooms.

The use of cement and stucco has had a strong influence on the design of Amer-



ican homes. Here again the simplicity of treatment is used with telling effect, in the small bungalow as well as in the full two-story house. The plain wall surface is given its full effect, pierced by the window groups. Perhaps no other feature has been more strongly affected than the cornice. It is designed in strong, bold

lines. The stucco of the wall surface is carried in the soffit of the cornice or the eaves, giving the protection of an unbroken surface, with a broad projection to the roof and a strong roof line in silhouette.

Stucco for the Bungalow

In its attractiveness the bungalow and

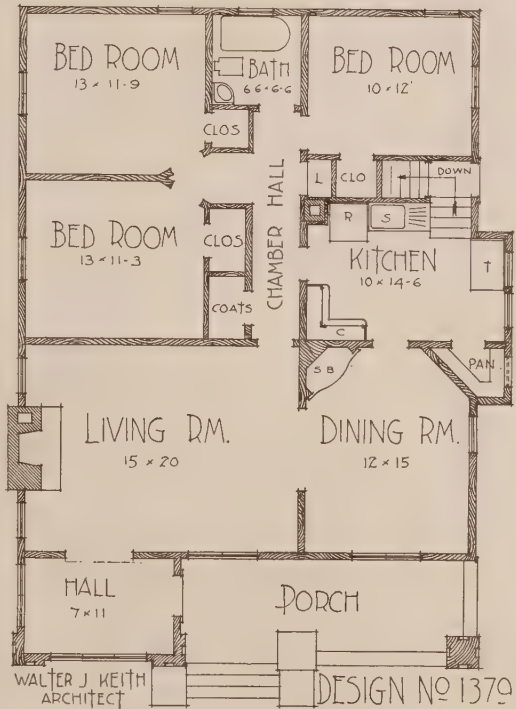


A logical pilaster treatment.

small house sometimes has advantages over the larger, more imposing house. It is more appealing, perhaps, because it is not imposing. A logical pilaster treatment is carried out in this stucco bungalow, which is very attractive, and the porch accessories are carried out in the same treatment.

While this bungalow is not large, yet the rooms are so compactly arranged and it is so well planned that the accommodations are adequate to the needs of a small family. The entrance from the porch is into a glass enclosed hall, and thence through a wide cased opening into the living room. Both living and dining room have windows on the porch. The living room is 15 by 20 feet in size. The big fireplace and windows fill one end of the room. Opposite the fireplace, through a similar opening, is the dining room. The corner sideboard is balanced on the other side of the door by a simple wall treatment at the same angle, enclosing a closet from the kitchen. The kitchen itself has built-in cupboards and work table. This table is particularly well lighted and has the usual bins and drawers built under it. The outside kitchen door is the grade entrance which leads down to the basement.

A hall sets the bedrooms away from the rest of the house and at the same time connects them and the bath room, making them easy of access from any part of the



house. The bedrooms are of good size and well supplied with closets. In addition to the closets in each room a large closet opens from the hall near the door to the living room and can be used for coats. A linen cupboard is provided. The bath room fixtures are closely grouped as the bath room is small.

An extremely livable home this is, and so easily cared for that the housewife is comparatively independent of the servant question.

A Permanent Home

THE size of a house is measured by its living capacity rather than by its actual size. The proportioning and placing of the rooms is the secret of ample living space rather than its being a

matter of feet and inches. Here is a home in which the main part of the house is 28 by 35 feet, not a large house, with a sun porch and library extending beyond, and a balcony over the sun porch.

This end of the house is almost entirely of glass, with the sun room below and the glazed sleeping porch above.

The exterior of the house is of brick and half timber, a happy combination, which yet lends itself well to climbing vines and greenery. Brick of a granite shade forms the first story, with stone trimmings. The belt course is at the second story beams. The walls and gables

one side and the dining room on the other. Opposite the stairs is a coat closet and beyond under the landing is a small toilet and lavatory. Sliding doors separate the dining room from the hall, and also separate the library from the living room. Both living room and library open on the sun porch with glass doors.

Connecting the dining room and kitchen is a pass pantry filled with cup-



Brick and half-timber makes a handsome exterior.

Lindstrom & Almars, Archts.

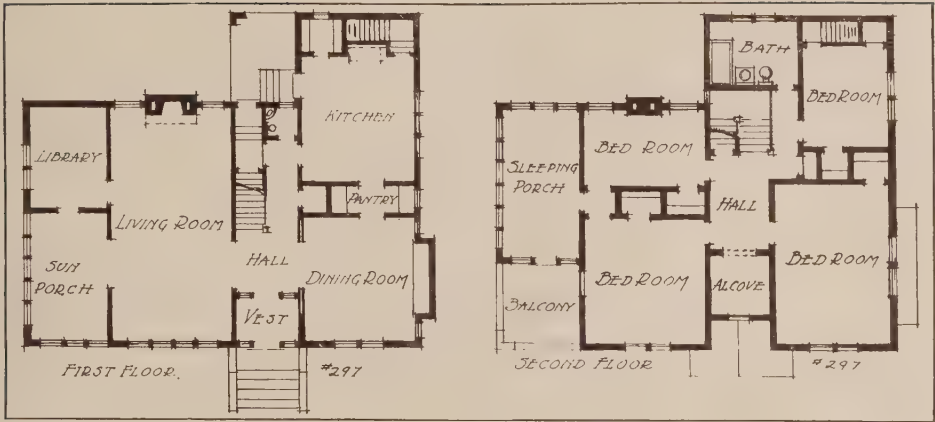
of the second story are covered with rough cast between half-timbers over metal lath. All exterior woodwork is stained tobacco brown while the roof is stained red.

The sun porches are fitted with sash to swing in, and their walls and ceilings are finished in Washington fir with encaustic tile floors in the sun porch and also in the vestibule.

The house is laid out to turn the wide side of the house to the street. The hooded entrance is filled with glass. Entering the hall a wide flight of stairs is directly in front, with the living room on

boards. A broom closet opens from the kitchen. The basement stairs are under the main stairs, convenient both to the kitchen and to the front part of the house. A grade entrance gives direct access to the basement under the main stair landing. Rear stairs open from the kitchen and communicate directly with the maid's room. Under these stairs is a kitchen pantry with shelving and cupboards.

The kitchen sink is on the same wall as the lavatory, making the plumbing fixtures on the first floor very compact. The bath room on the second floor is directly over these, giving the closest possible



connections to all of the plumbing pipes

On the second floor there are four bedrooms, all corner rooms with windows on two sides. Each has good closets, with a linen closet opening from the hall. The attic stairs are over the main stairs. One end of the wide hall makes an alcove, which may be used as a tiny sewing room if desired. The sleeping porch, which is quite good sized, is enclosed and opens from a tiny hall between the two family bed rooms.

The second floor of the house is finished in pine, to paint or enamel, with hardwood floors.

On the first floor the finish is hard-

wood throughout, with hardwood floors. In the living room the six-foot fireplace is the central feature of one end of the room, with windows on either side.

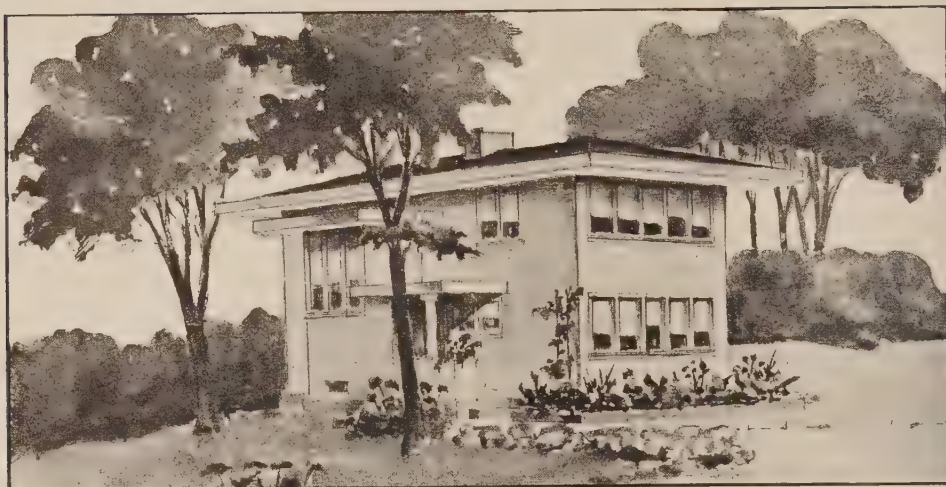
There is a full basement under the house, with the laundry under the kitchen bringing the plumbing fixtures under those of the other stories. The heating plant and fuel rooms are well located, as are also the vegetable, fruit and storage space.

The planting, which always adds to the attractiveness of the house, has in this instance been particularly successful. It gives the feeling of permanence as well as of home.

The Kitchenette House

IN the olden days on a New England farm our grandmothers wanted a kitchen that extended all across the rear of the house and it was none too roomy for its use. The two rooms at the front of the house were best room and bedroom and shut up a considerable portion of the time. The life of the house went on in the kitchen, which was really the living room. The cooking, the spinning, washing, ironing, eating and visit-

ing were centered about the roomy fireplace of the big kitchen. But a hundred years has brought us to a different way of living—our cooking is a simplified process because of the nearby delicatessen and corner grocery, our washing and ironing is either done in the basement laundry or outside the house entirely. We need to do few of the things in manufacturing that our grandmothers did. We buy our clothes ready made, we buy soap



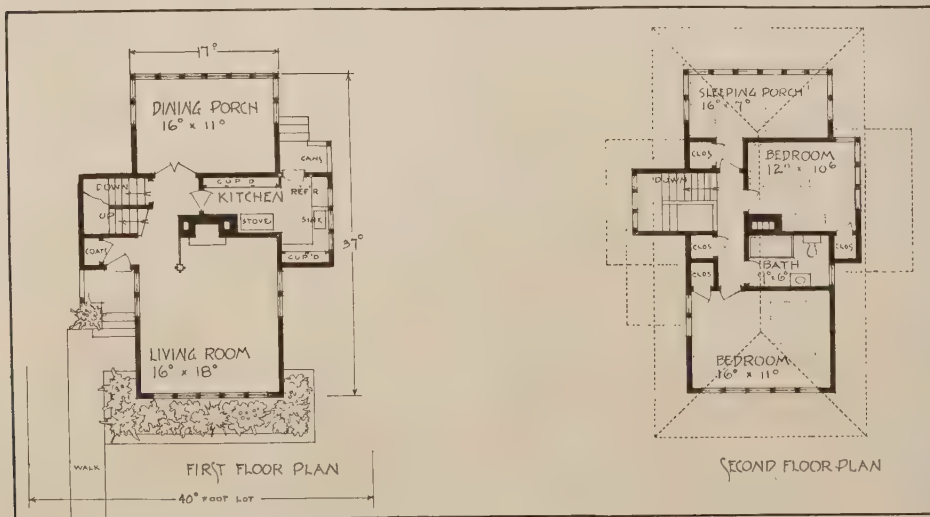
An economical and livable house.

Marion Alice Parker, Home Planning.

in boxes, and also most of the kitchen supplies. We do not dye, and we are coming every year to do less preserving and pickling. Our kitchen is a little workshop where we hardly do more than rush into it 15 minutes before the meal is to be served and prepare the food, most of it already cooked in some factory for the table. In this age of rush, rush, rush, a step saved is to be counted and the kitchen where you can reach from stove

to sink, from refrigerator to cupboard, is coming to be more and more the desideratum of a busy woman. Here is a kitchen of queer shape but see how workable; plenty of cupboard space, plenty of light, everything at hand. The porch could be enclosed and the refrigerator placed outside if desired, but it can simply be iced from outside in the position shown.

The dining room may be used in a variety of ways. It may be made a formal



dining room and all the meals served there, or it may be used more or less as a lounging room, and the meals served either there or in front of the fireplace in the living room in the cozy English way. The modern way of many busy housewives of having a formal dining room and then serving the majority of the family meals from the kitchen table, could well be improved upon without making additional labor. The breakfast tables now so often found, with broad, folding leaves, make an ample table for two or three.

The second floor has a well lighted hallway and an abundance of closet room, but not an inch of waste space.

The bedrooms are roomy and with excellent circulation of air.

The best point about the whole house if you want to build it is its extreme sim-

plicity of construction and the fact that not an inch of space is wasted anywhere. Yet with the simple roof lines you get a feeling of dignity and honesty.

Casement windows are designed throughout the house. Birch finish and floors throughout, full basement, with hot air heating and laundry.

The screen and light post by the fireplace is a little touch which gives dignity to the entrance and really serves a good purpose of shielding the occupants of the living room from draughts and the interruption of the front door.

Though it is designed for a forty-foot lot, you are well away from the lot lines and have plenty of light and air. Altogether it is a very economical house in every sense, cost to build and cost of labor in making it a livable home.

A Tiny Home

THIS snug little home was designed and built for an artist and his little family. It contains every practical convenience that can be built into a house, all of which are included in the plans but which of course do not show in the small picture shown on this page.

The house is only about 26 ft. front by 25 ft. deep, exclusive of porches and has been built several times in California at a low cost and at a somewhat higher cost it had a cellar and furnace and was built away up in Minnesota.

The exterior is weather-boarded with

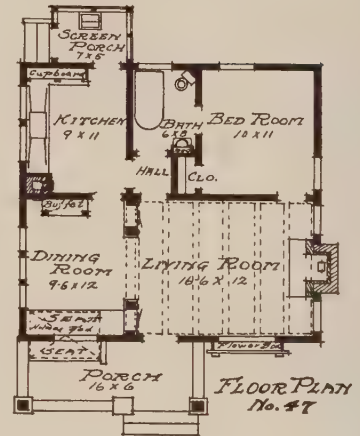
This Home
Was Built
for an
Artist



Bungalowcraft Co., Architects.

shingle roof, and projecting brick chimney. Inside the walls are well plastered either rough for tinting or smooth for papering at the option of the owner. Every built-in feature is included and a disappearing bed is installed under the broad seat in the dining room in such a way that it may be rolled out either into the room or on the front porch for an ideal out-of-door sleep on warm nights.

The end of the porch is well screened in such a way that the screens can readily be removed in case they are not needed. As every inch of space is utilized without the least indication of crowding this may well be called a very big little home.

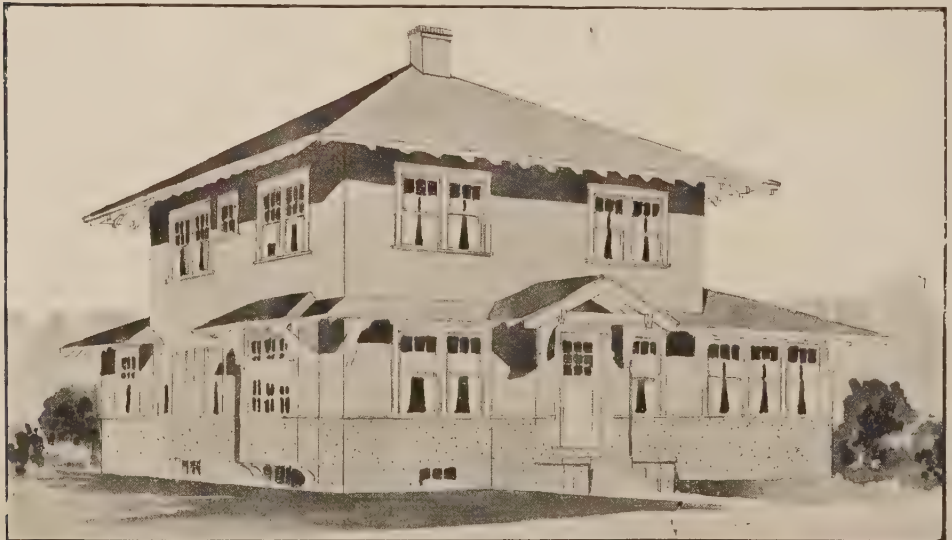


A Modern Two-Story House

HERE is a modern design for a two-story frame house, finished with cement stucco on the exterior from the grade line to the first story window sills and above this point to the roof is covered with narrow siding mitred on

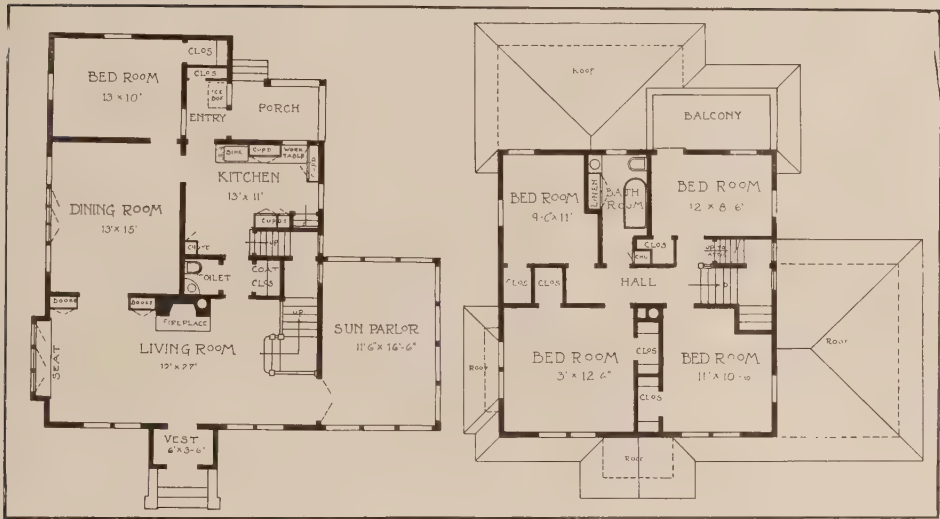
the outer angles. The architect estimated the cost of building this house according to the following description exclusive of heating and plumbing at from \$4,500 to \$4,800.

The house is 28 ft. wide by 39 ft. deep,



The hooded windows give added interest.

Chas. S. Sedgwick, Archt.



exclusive of the sun parlor at the right which is 11'-6" by 16'-6". There is a central vestibule entrance opening into living room 12' by 27' extending the full width of the front of the house, with French doors opening onto the sun parlor on the right, fronting to the east and south. A wide opening connects the living room with the dining room at the rear and fronting west. Beyond the dining room is a room designed to be used for a bedroom or a den 13' by 10', with an ample closet. The kitchen on the right of the dining room is 13' by 11' and is provided with ample cupboards and a clothes chute in the corner extending from second story to basement, and between kitchen and living room opening from either side of a small passage is a toilet room and a coat closet. The main stairs are carried up from the right end of the living room. They are wide and easy with two platforms and with the combination feature of steps from the kitchen leading up to

the main stair landing. Basement stairs are built beneath the main stairs with grade entrance. This plan has been carefully studied and has many conveniences. In the main living room is a wide chimney for fireplace with round tile flue for furnace, kitchen and laundry, and a separate flue for the fireplace. At the left end of the living room is a projected Dutch window or seat.

The second story has four good chambers and bathroom over the kitchen, each chamber provided with good closets. Over the rear porch is a balcony very convenient for shaking of rugs. The two principal rooms of the first story are finished in oak, all other portions of the house are finished in birch. There is a full basement with laundry, heating room, etc. The attic has storage space only; with stairs leading to the same, the roof is shingled and stained and all outside trimmings, cornices, etc., painted white.

The Chimney a Distinctive Feature



On entering one looks first for the fireplace.

Jud Yoho, Archt.

FROM the porch beside the living room the entrance is into a vestibule in this bungalow. A coat closet is accessible from the entry. The living room is entered through a wide opening, and first interest attaches to the grouping of fireplace with windows on either side which has been promised by the exterior. The living room, 16 by 20 feet with a beamed ceiling, makes quite an imposing room. A wide opening also connects with the dining room which has a beamed ceiling as well and is paneled. A built-in buffet is centered in the wall opposite. A door from the living room opposite the fireplace opens to the passage way which connects the other rooms of the

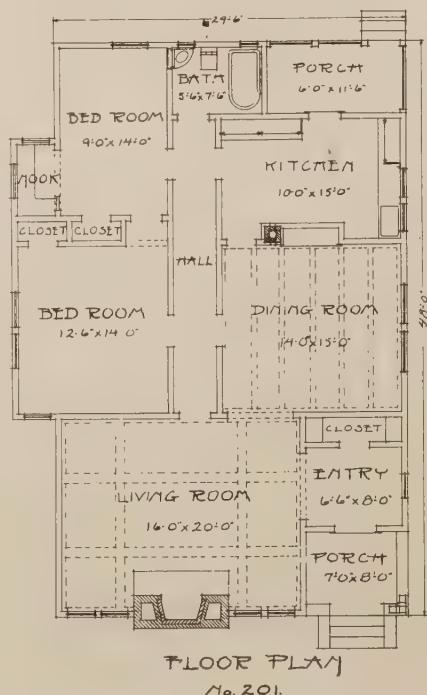
house and makes the bathroom accessible from any part of the house, a most desirable feature.

The two bedrooms are on one side of the hall with a door connecting them.

Each has a closet. The rear bedroom makes a good nursery for all manner of games. It may also be used as a sewing room with the nook for the machine and a doubly-lighted window-seat for the needle work.

The kitchen is fitted with cupboards, sink and drainboards. The working porch beyond has good space and relieves the kitchen of much of the work in pleasant weather.

The exterior of the house is shingled, with wide over-



hanging eaves, and all of the woodwork has a dark stain. The concrete of the porch and of the chimney is in strong contrast, and quite effective against the dark background.

The little formality of bay tree on either side of an entrance, or of palms or ferns in small tubs on a formal pedestal built to receive them, gives a distinctive

touch to an entrance, and leads one to expect a greater interest inside the house.

The treatment is very simple in this case. The porch wall of cement is carried to the height of a balustrade. The porch floor and steps are of concrete and the buttress at either side of the steps forms a pedestal for the tubs in which the small tree or ferns are set.

The Home of a Business Man

THE accompanying design, planned for a physician, is a plan quite as practical for the family where the man of the house maintains an office at home. This plan as will be seen from the illustration, was planned for a corner lot, the house proper facing the main street with entrance onto a small porch and from there into a reception hall.

A feature of the plan is the garage in the basement, built under the sun porch. The lot pitches from the corner both ways, and by building a retaining wall the drive enters the garage with only a

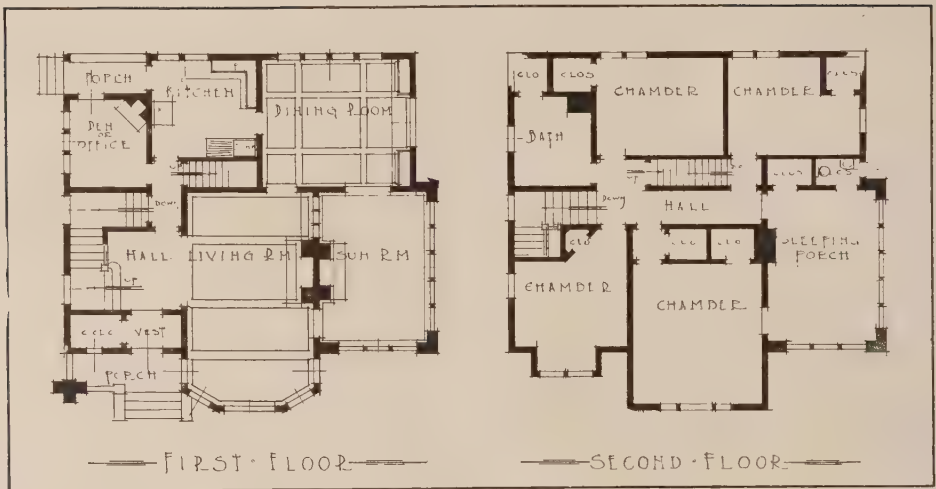
slight drop from the sidewalk level to the garage doors.

The large living room with its bay window projected in order to take advantage of the view of the park down the street a block distant, makes an exceedingly attractive and homey gathering place for a large family. It has a massive brick fireplace, and beam ceiling. A French door opens onto a large sun porch which has an open fireplace. This room is fitted with casement sash, and has a tile floor, which has been laid over a reinforced concrete slab to comply with the building ordi-



Planned for a corner lot.

W. W. Purdy, Archt.



nance which requires walls and ceiling of a garage to be of fireproof construction where same connects with residence.

French doors open in to the dining room, where a massive buffet extends across the entire end of the room. The kitchen is complete with built-in cupboards.

The small office has a corner fireplace and can be reached from the front of the house, from the grade entrance or has direct access to the rear porch, making it very convenient for patients or business callers at the house.

The main stairs lead up from the reception hall, and under them are the basement stairs, with a grade entrance. The rear stairs start from the small hall beside the kitchen door. These land at the opposite end of the main hall and allow the maid direct access to her room. A door shuts this service hall from the rest of the house.

On the second floor are four chambers and in addition to these there is a large

sleeping porch, and large bath. A stairway leads up over the rear stairs to the attic where two additional servants' rooms or a large amusement room might be finished off.

The stairway leading to the basement is convenient to the front of the house. Beside the garage there is a laundry with a dry room adjoining, a fruit and vegetable room, a fuel and furnace room.

The floors of the main portion of the house on the first floor are of oak, with fumed oak finish in the living room, and the dining and sun room are finished in ash, stained a silver gray, the kitchen is in pine for white enameling with linoleum floor. The office is finished in fir with linoleum on the floor. The floors on the second floor are of maple with pine trim for white enameling, tile floor and wainscot in the bath.

The exterior walls are of frame with stucco applied over metal lath, with shingle roof stained.



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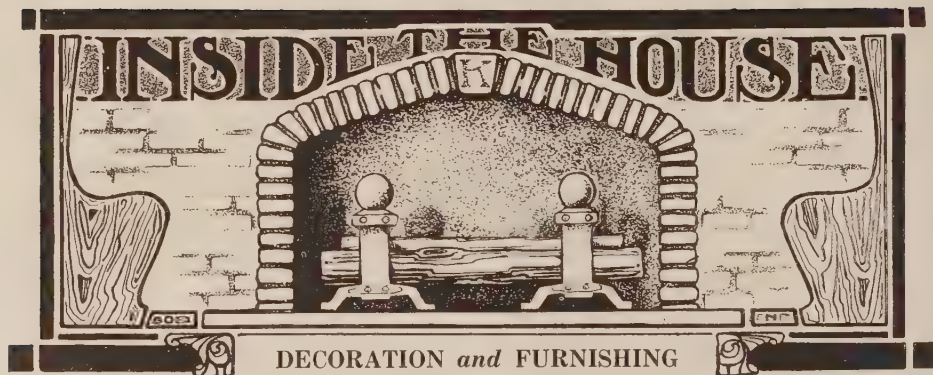
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The Background for Home Life

GOOD decoration in the home appeals with special force to cultured people, to whom the beauty of design and color is not only a source of genuine enjoyment, but a constant necessity. The hangings for the walls, the selections of the fabrics for the draperies, the choice of laces and their harmonious treatment, all tend to disclose the characteristics of the occupants.

The general form of wall surface in the usual home is a smooth white plaster,

which may be treated in a number of ways. It may be finished in flat oil applied directly on the plaster, blended and stripped and then embellished with stencils, or worked out in free hand. Also, the walls may be finished in water-color or hung with paper, burlaps or some of the many different fabrics.

Invariably the home builder puts more money into the completion of his home than was at first intended; therefore, for the sake of economy, wall paper is de-

cided upon for the wall covering. Studied from the standpoint of the almighty dollar, nothing will approach wall paper when one is striving for truly artistic effects at a moderate price.

To enhance the beauty and dignity of a well planned home serious thought should be given to the selection of colors, the design



A charming living room done in pretty color and mulberry. (Residence of Dr. H. E. Braasch.)

INSIDE THE HOUSE

of patterns, the quality, texture, etc., of any material which is to be introduced into the home for the purpose of decoration. These should all be carefully worked out in conjunction with some person who has made this work a study and who understands the technical points and their inter-relations. Under no circumstances should you seriously enlist the aid of your neighbors or intimate friends, because they have dabbled in china painting or "done a few things" in oils. Bear in mind that it is your own home you are planning; that you must live with this or that paper surrounding you for a number of years; that you cannot discard it like a poorly selected garment and also, that if you have made an unwise selection, you will have a long time to regret it.

Never make a final decision on the wall and window hangings of your living room, in fact any room, until you have had large samples submitted to you in your own home and lived with them for a few days, both by natural and artificial light. It is surprising how different some paper will appear when brought into your own home surroundings. In the salesroom it was charming, but in your home it may be entirely out of place.

As the welcome guest enters the house, he should have a feeling of pleasant anticipation; as he steps into the living room, the eye should be met with pleasing gradations of colors or soft contrasts and not be shocked by a series of discordant notes.

Living Room.

The accompanying photo shows one end of a charming living room done in putty color and mulberry tones, which make a pleasing and harmonious contrast when properly handled. This room has a south and west exposure and the large expanse of glass admits a profusion of sunlight.

The walls are hung with a heavy embossed paper of a beautiful putty shade with a slight textile weave which makes



Beyond is a most delightful sun room. (Residence of Dr. H. E. Braasch.)

a splendid background for a few well chosen pictures which may be framed in Circassian walnut or dull gold. The panels of the heavy beamed ceiling are done in a light cream tint just off the white.

The window hangings are built of a heavy Sunfast repp in a beautiful shade of mulberry, the side curtains being unlined, but finished with a two-inch hem and caught back with bands made of the same material, edged with a small cord in dull gold.

Each group of windows contains four casement sashes which swing into the

INSIDE THE HOUSE

room with stationary transoms above. The old fashioned lambrequin with pipe pleats finished with a metal galoon in dull gold, is made quite shallow so as to admit plenty of light and allow a free swing to all of the windows.

The lambrequin is made over heavy buckram, lined with cream sateen and attached to a narrow pine board with a three-inch return at each end. The side curtains are of fifty-inch material split in half, pleated to fourteen inches and hung with rings over small books screwed into the back of the board. Screw eyes at each end of the board permit the board (with lambrequin and side curtains attached) to be hung on two long hooks which have been screwed into the window casing at the upper corners. This arrangement is a blessing to the housewife at cleaning time as the hangings can be easily removed by simply lifting them from the hooks.

The laces are made of a very soft "all over" pattern fancy net, with two-inch hems on both sides and bottom. The tops of the laces are not finished in the conventional manner with casing and heading, but are pleated to fit the width of each window with small rings attached to each pleat, the pleats averaging about six inches apart.

The laces are suspended from a small brass rod, fastened to the casings with brackets projecting two inches and placed immediately behind the board, allowing plenty of room to slide the laces to one side when the window is opened. When the window is closed the laces may be easily drawn back and, the pleats being accurately spaced, each fold will find its proper place.

Opaque shades are also concealed behind the lambrequin with plenty of room

to roll freely between the glass and the laces.

This form of drapery, the lambrequin embracing the four windows, with the addition of the laces which are very sheer and do not interrupt the view, presents a broad and satisfactory treatment without stuffiness.

At the other end of the room is a wide generous fireplace of grayish brown brick, showing touches of soft green and dull red. A plain six-inch oak slab extending the full width of the room, forms the mantel. With bookcases on each side and small casement windows arranged in pairs over the mantel, the fireplace is the architectural feature of this very livable room.

The floor is covered with a large Mahal rug from that far off village of Sultanabad. The field of the rug is a rich red with a beautiful luster, in a pure Far-ghan pattern, while the wide border is worked out in dark royal blue, deep red and camel's hair brown.

Sun Room.

Opening off this room with two large French doors, is the most delightful sun room imaginable. This room extends from the front of the house with six groups of swing windows arranged in pairs on three sides, permitting a splendid view in all directions.

The walls are hung with a cool gray striped paper in two tones, with a simple border to relieve it at the beginning of the coved ceiling. This room depends solely on the blue and rose cretonne with its gorgeous splashes of color, for the decoration.

A flat stiff valance made over buckram with side curtains of split width, is used in this room and hung from a frame in the same manner as the living room dra-



peries. This cretonne is unusual, being printed on both sides and appeals to the eye when viewed from the street.

Cretonne shades are hung on the French doors on the sun room side and when drawn halfway down with the light showing through them, they give a wonderfully charming effect. These two cretonne shades are made of half widths, fastened to ordinary shade rollers, scalloped on the bottom and finished with edging. A thin bar of iron is slid into a small pocket near the bottom of the shade to make it hang flat and smooth.

This room is what its name implies; a sun room pure and simple and no laces are hung at the windows for this reason; the wood muntins being sufficient decora-

tion. When it is desired to shut out the strong light, a large opaque shade may be found, concealed at the top of the window behind the valance.

All the furniture for this room is of comfortable cool wicker, enameled in old ivory, with cushions and back pads filled with fluffy silk floss and covered in the same cretonne.

The lighting of this room is obtained from a luminous bowl, which throws the light on the ceiling, suffusing the room with a soft glow which is soothing and restful to the eye.

As sunshine is a synonym for health, happiness and optimism, this little room should be a constant joy and pleasure to the occupants.

Buying by Proxy

Keith's Guide on Home Decoration and Furnishing
Brings Some Notes from the Shops

Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration," a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given FREE OF CHARGE. Enclose stamp for reply.

IT is surprising to see the wonderful increase being made in the abundant use of chintzes, cretonnes, printed linens and cottons, which are now available in a wide range of design and coloring and are charmingly adaptable in beautifying the rooms of our modern habitations.

The delicate pinks, blues and yellows of Priscilla's garden; the printed linens of old England; and the crude block prints with their gorgeous splashes of color on a black ground, each with an atmosphere of its own, radiate color, sunlight and cheerfulness.

In the treatment of doors and windows, charming fabrics may be procured suitable for any scheme of decoration or

architectural design that may exist.

"My lady's chamber" offers an exceptional opportunity to bring into the home the atmosphere of the garden with the aid of these inexpensive fabrics with their delicate harmonious colorings and pleasing designs.

A very attractive sleeping room may be conceived having the walls covered with a simple narrow stripe paper in French gray with ceiling treated in a creamy white; or, if a stripe is not desirable, a soft gray Chambray paper with a rough linen finish may be substituted. This may be used with woodwork enameled in white or ivory and rubbed to a dull finish. The floor should be coated with white, not orange, shellac and

INSIDE THE HOUSE

waxed. This chamber scheme may include a rug made of body brussels carpeting with a twelve or eighteen inch border. This popular material comes in a wide range of designs and colors and are usually copied from the better grades of Wiltons. The body of the rug should be of a small pattern in cube form or of an interwoven design on the lines of a trellis or lattice.

The field of the rug should be in two tones of gray somewhat deeper than the wall color, with touches of rose, tan and green in the narrow border. Some of these carpets have a little contrasting color scattered over them in the form of roses carelessly thrown here and there and are very effective.

The walls being in gray it is preferable to display plenty of color in the draperies, which will permit the abundant use of cretonne and prints. At the windows a twelve-inch ruffled valance gathered on a rod projecting from the casing two and a half inches, with side curtains underneath, made of fifty-inch material, split, or two single strips of thirty-six inch fabric, and caught back with cuff bands, make a very simple and pleasing treatment.

The valance may be made more elaborate by stretching the material flat over

buckram, shaping the bottom edge and finishing with a narrow edging. Also the side curtains may have on the front and bottom edge a three-inch band of plain percale or cotton taffeta to match the ground color of the cretonne with a very small cotton cord placed over the seam where the two fabrics are joined. This will necessitate lining the side curtains with satene.

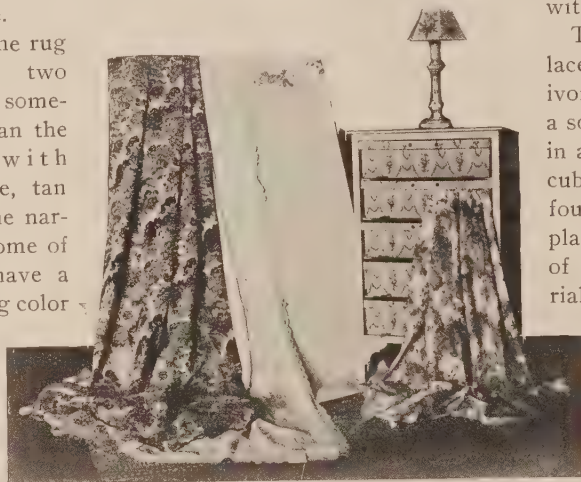
The filmiest of laces in white or ivory or curtains of a soft Swiss muslin in a suitable dot or cube design with a four-inch ruffle of plain organdie or of the same material, is the proper thing. The ruffle should be cut from the length of the fabric instead of cross wise as it will ruffle better.

Remove

the closet door and hang a cretonne curtain inside the opening on a small brass pole with traverse rings. Or, if the door is to remain and it is desirable to cover the woodwork, a swinging crane attached to the casing will carry the portiere nicely.

A slab of plate glass with a polished edge (a bevel edge chips easily) cut the size of the dresser top, with cretonne underneath, is more practical and decorative than a lace cover.

Cover the chairs with the same cre-



Chambray wall hanging No. 90, 22 in. wide, at 50c single roll; border No. 85, at 35c per yd. Lace curtains 36 in. wide, 2 1/2 yds. long, No. 5215935, \$4.50 pair. Cretonne on left; roses on white taffeta ground; 36 in. wide, 55c yd. Gray and rose Brussels carpet; carpet 27 in. wide, \$1.85 yd.; border 13 in. wide, \$1.35 yd. Shadow taffeta on the right, printed on both sides; 50 in. wide, \$2.60 yd. Lamp stand in high relief in old ivory and rose; No. 012, at \$2.75. Lamp shade in Papier-mache, edged with rose and green, \$1.00. Linenette Cabinet with 5 sliding drawers, covered with French cretonne, No. 169, \$25.00; enameled in ivory.

INSIDE THE HOUSE

tonne or make loose slip covers which can be removed for laundering. A cretonne spread may be made for the bed with side and foot valance, gathered or pleated on a sheet and laid on springs under the mattress. If this makes too much color in the room a Marseilles spread is always appropriate.

A finishing touch may be given to the room by having shades for the side lights made of the same material and gathered on little wire frames. If the cretonne is too stiff, soft sheer silk may be used.

After the room is completed, an artistic touch may be added by taking the motif and coloring from the cretonne and applying in free hand, four or five clusters of flowers on the prominent wall spaces immediately under the picture moulding.

A spray here and there may pass under the moulding and project a few inches out on the ceiling. This must be executed in water color and handled in a very sketchy manner with very little detail worked out.

A clever conceit is a luminous bowl for indirect lighting hung with chains from the center of the ceiling. These bowls are to be had with a floral design etched on the surface. A thin transparent glaze of the same color as the decorations, is to be applied to the etched design and when illuminated presents a stunning effect. The finish of the metal parts of the lighting fixtures should be in silver.

Lingerie cabinets are very much in vogue. These clever pieces of furniture are simply light frames of wood enameled the same as the wood trim of the chamber, with sliding boxes of heavy card board, covered with cretonne of the desired pattern. Dainty desk lamps are shown which may be selected in the prevailing color of the room.



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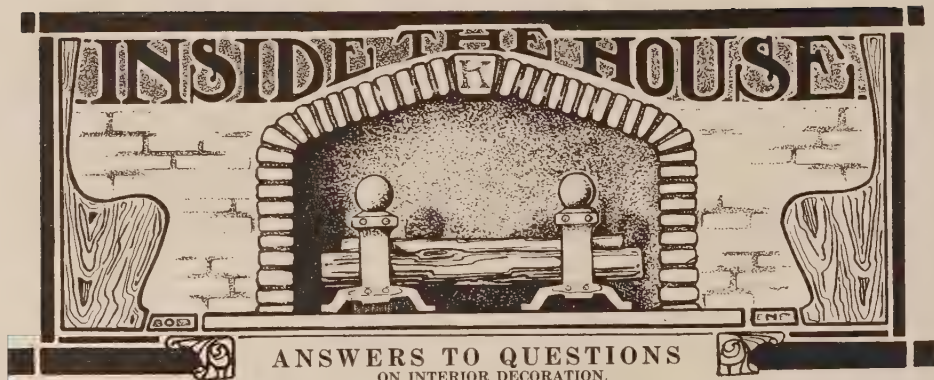
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Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

A Color Scheme.

C. R.—We are building a house and have gotten to the interior decorating. Will you kindly advise us?

Our woodwork is oak, dull finish, not very light, and not very dark.

We have a southern exposure for our living room, and our hall opens into same, also French doors in living room on the east; the hall has western exposure.

We had intended finishing the walls in a light gray tone, and having mulberry rug and hangings.

The question of fireplace brick has come up and our original plan was a tan, something that blended well with the woodwork.

Dining room has north, east and southern exposure. Can we use the blues in this room?

Ans.—In reply to your questions: Your color scheme so far as you state it is excellent. The oak finish, gray wall and mulberry is a fine combination.

The fireplace brick will be even prettier in gray than in tan and blend equally well with the woodwork and better with the wall. Gray brick is never a true gray but has an ecru cast very soft and pleasing, laid up in mortar slightly darker than the brick. The hearth, of course, the same. The wall should be a fawn gray also. There are many lovely tones of this gray in paper, but it is not so easy to get a tint.

Yes, old blue will be entirely feasible in the dining room, especially if combined with the same warm gray as a dado or

background in a decorative paper, in blue, dull green and warm gray. Some of the grasscloth papers which combine these tones would be good in the hall and complete the scheme.

To Supplement Black Walnut Furniture.

L. G. N.—I would like to have your ideas and suggestions for rugs and hangings in a living room and dining room, opening together. The walls will be the color of rough plaster, sand finish, with beamed ceiling.

The living room has an eastern exposure, extending the entire width of the house. The dining room faces south.

I have old-fashioned black walnut furniture for the dining room, and enough to partly furnish the living room.

If possible I would like to have the woodwork in both rooms finished in mission.

Suggestions in the matter of color schemes, etc., would be appreciated.

Ans.—We have lately seen a house furnished similarly to yours, in which the woodwork was treated with a dark stain, Antwerp or Cathedral Oak. These stains are darker than mission and the effect with the dark antique furniture was rich and elegant. A rubbed wax finish will be better than varnish.

With the eastern exposure of the living room, we would use a mulberry color in the rugs and hangings, which will offset the rather cold effect of the gray plaster.

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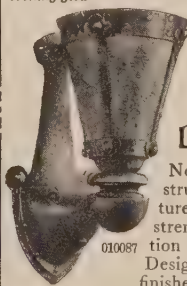
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living room with wicker, stained dark gray and upholstered in a cretonne having gray and dull red or mulberry coloring. Such cretonnes are easily found in the large cities. The hangings should be plain mulberry color.

The dining room rugs and hangings should be soft old blue.

Picture Moulding.

W. R. T.—“As regards interior woodwork for this house, are they now using a continued belt course from the tops of the door and window casings around a room in place of a moulding? I now intend to have my rooms tinted instead of papering them. I understand that a ‘sand plaster’ will take a tint better than a hard-finish plaster. However, will a sand plaster take wall paper in a satisfactory manner?”

Ans.—A flat moulding which carries a line at the top of the door and window casings makes a very effective division between wall and ceiling color or material, but it should not be heavy. The picture moulding is ample and this placed on a line with the tops of the door and window casings, bringing ceiling color down to it, gives a very satisfactory frieze effect. The addition of a little cornice mould in the corners where ceiling and wall come together adds much to the richness of the effect.

“Sand plaster” finish does take water color tints better than the smooth putty finish, but it is very difficult to get as satisfactory a job of wall papering over the rough sand surface as can be secured over the smooth putty finish.

A Colonial Interior.

R. D. H.—As a constant reader of Keith's, I turn to you for advice in decorating our new colonial home. I am

sending you a rough sketch of same. The woodwork is in white with mahogany doors. Kindly suggest colored scheme for living room, dining room, hall and den. At present I have the contents of two living rooms. In one I have mahogany pieces; a rug 9x12, in which the colors are old rose, cream and blues. In the other I have mission furniture. I got new mahogany furniture for my dining room (Adam style), also a Wilton rug. The colors are principally gold and blue. What color should the walls and overdrapes be?

I am very anxious to have everything in good taste and feel sure you can help me.

Ans.—We should advise a soft greyish tan for the walls of living room in a grass-cloth weave of paper, emphasizing the rose of the rug in the over curtains and some furniture. The glass curtains should be ecru rather than white. We should use the mahogany furniture in the living room and place the mission pieces in the den. A dull bronzy green would be a good color for the wall with the mission oak and the south facing.

Blue and gold is very pretty for a dining room but as yours has only north and east exposures, we should make the walls old gold and ceiling deep cream. You could then have curtains of old gold sunfast or a madras with blue and gold mixed.

We should use a tapestry paper on the hall in colors that would blend with both the tan and rose of the living room and the blue and gold of the dining room. There are such papers in soft tones of all these colors. One having a pale tan or gold background with design introducing the blended colors. Tint the ceiling pale tan or ivory.

Decorative Service

WHERE detailed plans for HOUSE DECORATION are desired with samples and prices of wall paper, fabrics, window drapes, etc., the moderate fee of \$1.00 per room or \$5.00 for the entire house will be charged to defray the expense of our decorator's time in working up the plan, securing and mailing samples. Address

Keith's Decorative Service, McKnight Bldg., Minneapolis, Minn.



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With Little Cost and Trouble**

You, among many of Keith's readers, are probably planning to build or repair. Above all, you want the interior of your home to be artistically distinctive—inviting and modern. You certainly don't want plaster, because you know it cracks, chips and falls. You don't want dusty, falling wall paper—unsanitary, and meaning constant expense for re-papering. Why not use

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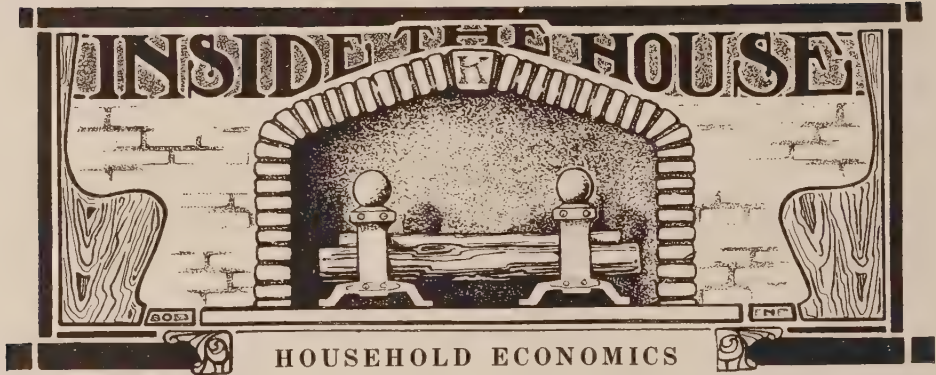
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HOUSEHOLD ECONOMICS

Full Efficiency for the Window Opening

A DEVICE has lately been perfected and put on the market by which both parts of the usual double sash window may be opened at the same time if desired. This gives a full efficiency to the window, allowing the full space to be opened, instead of one-half or less as the possible maximum opening. The sashes are weightless and reversible. One sash only may be opened and that to the smallest degree,

one or both may be turned to leave the entire space open, or the sash may be entirely reversed, allowing the outside of the windows to be washed from the inside. The movement of the sash is rotary, and entirely outside of the line of the window stop, so that it does not interfere with a screen on the inside of the window, nor with draperies over the window opening.

Schools, churches and public buildings are availing themselves of the open air possibilities of this device. It has especial value for sun and sleeping porches, but it is applicable equally to the regular windows in the house. Its possible application to residence work, and to all of the windows in the house as well as to glazed porches, gives it a particular interest to the home builder.

Nearly every feature in building construction has kept pace with modern demands except windows for the home. These have not changed materi-



A dining room where both sash opens.

His Coal Cost Cut In Half



**$\frac{1}{2}$ to $\frac{2}{3}$ Guaranteed Saved
The UNDERFEED Way**

You can't fail to get the real *money significance* to you of a letter like this—one among thousands of such others telling of more and better heat for less money the New-Feed UNDERFEED way. It's mighty interesting:

"In all my years as a householder I have never taken care of a furnace that requires less labor than the UNDERFEED. It has heated my home during this long and trying winter, on what, on a conservative basis, I should say would be about half what I have formerly expended on other furnaces with less favorable results.

(Signed) Jas. S. Copeland,
98 Murray St., Binghamton, N. Y.



with the most effective radiation surfaces. Fire is never chilled, because there are no feed doors to open. There is no smoke, soot or gas, because these valuable heat elements are all consumed, since they *must* pass *UP* through the fire.

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A boy of twelve can handle the New-Feed UNDERFEED with every success. A few easy strokes of the operating lever from a standing position, and the fire pot is replenished with coal. And the New-Feed UNDERFEED burns the cheaper grades of coal as effectively as others burn the costlier grades. No clinkers—no partly burned coal. Everything burned to clean white ashes—and few of them.



This cut-out view of the New-Feed UNDERFEED Furnace shows how it burns coal on the "candle" principle. Fuel is fed from below. Clean, effective flame always on top. All smoke, gas and dirt transformed into usable heat. No waste.

Save Your Coal Money Likewise

All this comfort and saving is due to the scientific principle of combustion of the New-Feed UNDERFEED. Coal is fed from *below*. The clean, live fire is always on top—in direct contact with the fuel, because there are no feed doors to open. Since they *must* pass *UP* through the fire.

Ask For Free Book

It is called "From Overfed to Underfed." Solves many a heating problem for you. It's free. No obligation. Just send the coupon today—NOW. Remember, a saving of $\frac{1}{2}$ to $\frac{2}{3}$ coal cost is actually *Guaranteed* the New-Feed UNDERFEED way—a guarantee backed by a million dollar concern.

The Williamson Heater Co.

(Formerly the Peck-Williamson Co.)

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Tell me how to cut my coal bills from $\frac{1}{2}$ to $\frac{2}{3}$ with a Williamson New-Feed.

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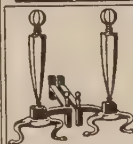
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in

Name

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INSIDE THE HOUSE

ally since Colonial days, other than a better adjustment of weights and pulleys and the fact that glass is made in larger plates so that small panes are not necessary in modern work. Even the casement sash is an adaptation of the much older English casements.

The ease with which screens and window draperies are arranged with double hung windows has done much to

cords, ecetera. The sash is not unlike the ordinary sash in appearance and, equipped with the metal attachments, it is fitted into a plank frame. A pivot and shoe in the top of each sash slides in a groove in the jamb of the window, while a carrier arm attached to the sash gives an outward rotary motion which opens, and finally if pushed to the limit reverses the sash, placing it with the outside of the glass in the room. This makes it easy to reach both sides of the window in keeping them clean. It also facilitates reglazing a broken light of glass, and refinishing the window.

The open sash sheds rain, several sashes acting as a louvre. With a shade attached it serves as an awning. The window is easy of operation. It is noiseless, the window itself cannot rattle, and there are no weights to rattle in the box.

An efficient weather strip may be readily applied to this window. Storm windows may be placed either outside of

the window in the usual way, or they may be pivoted on the inside. When the storm sash is pivoted on the outside, the lower rail of the storm sash is attached to the lower rail of the bottom sash of the window and moves with it. In reversing the lower sash the storm sash automatically unlocks.

Screens may be easily arranged on the inside of the window. They may be pivoted at the top and swing in so that they will not interfere with the shades and draperies, and be easily removed when desired. A rolling screen is perhaps the most convenient device for screening a window opening.

These attachments, as applied to casement windows, take the place of hinges and hold the window firmly in at any



For a sleeping porch.

keep them in general use, notwithstanding the fact that they only give half efficiency in their opening. Most windows are not opened even to their full efficiency on account of the draft they produce.

The angle at which the reversible window turns tends to allow the air to enter at the upper part of the window opening without causing an objectional current of air, thus giving the ventilation so much needed. This window, it is hoped, may help to solve the vexed problem of ventilation in the home through the winter months and more open air in the house when it is desired.

In construction this type of window is much simpler than the double hung window, with its box frame, weights, pulleys,

INSIDE THE HOUSE

desired position. They may be applied to three-fold or four-fold casements with or without transoms over and used without mullions between the sashes.

A Rolling Screen.

We have become willing to look through a wire mesh screen for two-thirds of the year, rather than be subjected to the pest of insects when we wish to open a window. A rolling screen has been devised which allows the screen to be pulled down when the window is opened and rolled out of sight when not needed. Such a screen is especially well fitted for use with the reversible window illustrated, and may be found useful in many conditions. The copper wire mesh screen is mounted on a spring roller in the usual way. The edges are metal bound and are arranged to run in a guide on either side of the window. When the window is opened the screen is pulled over the opening, and when not needed is rolled up out of sight.



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She may be willing, but she can't be as accurate. Her other duties divert her thoughts, and open, uncontrolled dampers allow the fire to go too far, burning coal wastefully and making the house too hot. The reverse might also be true and the fire go out for lack of draft or burn so low as to give little heat.

This device affords a sure, safe, guaranteed method of accurate temperature control. By automatically regulating the dampers it maintains the temperature desired—a warm even temperature during the day and a lower degree during the night hours. An absolute requirement in every modern home.

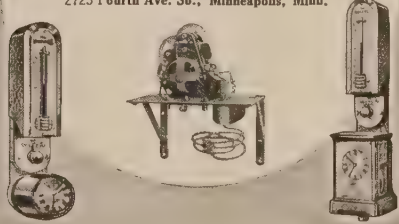
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Twelfth Night

EXCEPT for New Year's Day, which has fallen greatly from its high estate, the only festival January has to show is Twelfth Night, the sixth of January, which used to be made much of, and still is in Europe, as it marks the end of the Christmas season. Then is the time to take down all the Christmas greens, and to have the final eating of the Christmas cake. The cake for Twelfth Night must

have all sorts of things baked in it, and the person who gets one or another of them has his future determined for him.

It is rather an amusing thing to have the cake and its cutting for the final attraction of a children's party. Naturally the cake will be a very simple one, but with plenty of raisins, and spice so that it may look as Christmas cakey as possible. The coin and the thimble and the ring may be repeated several times, so

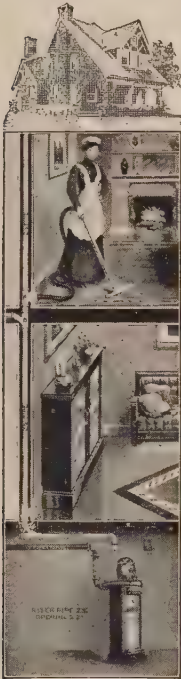
that each child may have a fortune. To the end that every slice of cake may contain one or other, fill the round pan half full and arrange the articles at regular intervals, before pouring in the rest of the dough.

A Vegetarian Meal.

Recently I watched the preparation of a meal, which was substantially vegetarian, and which was intended to give a large amount of nourishment at a very small cost. It consisted of lentil



A cake for Twelfth Night.



Write today for the TUEC HOME BOOK It is FREE!

BEFORE you let your contract for that new home you should read this little book that tells how thousands of other home makers, like yourself, have solved the problem of *keeping their new homes new*. Learn how they have solved the housecleaning problem, simplified the servant problem and insured their family health and happiness by means of the

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Protect your family's health and keep your house and grounds clean and sanitary with a **Majestic Garbage Receiver** and a **Majestic Coal Chute**.

Bury the Garbage Receiver in your back yard close to the kitchen. It is handy, but never unsightly. It is sanitary, emits no odors and keeps contents safe from dogs, flies, insects and vermin.

The Coal Chute can be placed in the cellar window space. It protects the house from mares, saves the lawn from coal dust and prevents a waste of coal.

MAJESTIC

Garbage Receiver

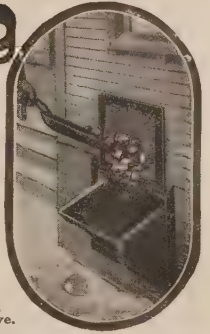
The only part exposed is the top and door. This opens and shuts with the foot to empty garbage. To empty contents simply take off the iron top and lift out the can.

Coal Chute

Hopper comes out and catches all the coal. None is scattered over the lawn or sill. When closed sets flush with the foundation. Has a glass door giving good light to the basements. It locks from the inside and is absolutely burglar proof.

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New York City, 50 Beekman St. Los Angeles City, 5212 Saida Ave.



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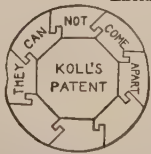
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TABLE CHAT—Continued

soup, a savory dumpling and a bread and cheese pudding. Fried bread was served with the soup.

Lentil soup is the penny dinner, about which we have heard so much in war times, and is immensely nutritious, all the legumes, lentils, peas and beans, being very rich in proteid. For four persons, half a pound of red lentils were used, soaked over night in a quart and a half of water, the water strained and saved. Two large onions, a carrot, a turnip and a stalk of celery were prepared, cut fine and put in the bottom of an iron pot, in which a tablespoonful of



Fried apples and sausage.

dripping had been melted. In this the vegetables were stirred till they were coated with the fat. Then the lentils and the water in which they had been soaked, and a teaspoonful of salt were added, and the whole simmered slowly for three hours.

The fried bread was very easily done. Thick, crustless slices were spread on both sides with beef drippings and laid on a tin pan, then cooked in the oven, browned on one side, turned and browned on the other, finally cut in small squares.

The soup was designed to give as much nourishment as possible, and so was merely run through a colander, after the addition of pepper and what salt was needed, but for ordinary use it would have been rubbed through a purée sieve, while it would certainly have been the better for a tablespoonful of butter. Lentils have a better flavor than either, but beans, Scotch or split peas can be used in the same way, while canned tomatoes are a delightful addition.

The savory dumpling was merely a suet crust, made with a quarter of a pound of

suet and half a pound of flour, a teaspoonful of salt and cold water to mix, into which were stirred three finely shaved onions. It was moulded with the hands into a ball, tied up in a floured cloth, room being allowed for its swelling, and boiled three hours. When done it was turned out, cut in slices and covered with a brown sauce, which was to begin with a plain drawn butter, to which a cup of gravy and a dash of Worcestershire had been added.

The bread and cheese pudding was the ordinary bread and butter pudding, a mixture of two tablespoonsful of grated cheese and one of butter being used for spreading the bread. Over this was poured a custard of one egg, a cup of milk, a little salt and a little made mustard. After standing for half an hour, the pudding was steamed over boiling water for half an hour, or until the custard was set.

The cheese pudding finds a use for the odds and ends of dry bread which are apt to be on hand, also for rind ends of cheese, which should always be grated as fast as they accumulate, as for some mysterious reason, grated cheese does not mould as quickly as pieces. Stock can be substituted for the milk, and the liquid should do no more than saturate the bread. If the bowl in which it is steamed is well buttered, the pudding can be turned out upon a dish and keep its shape. This is a very good and substantial luncheon dish.

Cooking Sausages in the Oven.

Sausages are very popular, but they are also unpleasantly odorous. This difficulty is obviated by cooking them on a plate in the oven. An old platter is convenient, and they will take from twenty minutes to half an hour. Prick them and arrange them side by side. When the fat has fried out of them, pour it off and turn each sausage, and they will be far drier and crisper than if cooked on top of the fire. Spread the drained-off fat on slices of crustless bread and brown them in the oven, or in a hot frying pan; or choose a crisp apple like a pippin or a Baldwin, peel and cut in rather thick slices and fry in the drained off fat, and serve on the same platter with sausages.

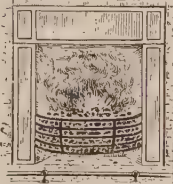
Gain Comfort, Secure Health and Economize Heating Expense

by warming your home with our open grate fire that does *More* than look bright and warms *More* than one room.

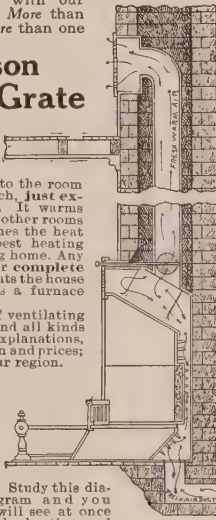
The Jackson Ventilating Grate

does all these things, and *More*. It draws in fresh air from outside, warms it by circulating it around the fire in a warming chamber and then pours it out into the room thru the register over the arch. *Just exactly* as a furnace does. It warms several connecting rooms, or other rooms upstairs, furnishing four times the heat from the same fuel. The best heating investment for a cheer-loving home. Any mason can set it up from our complete plans furnished Free. Heats the house in Fall or Spring as well as a furnace with about half the fuel.

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Interiors Beautiful

200 VIEWS



IN PLANNING the new home or in the remodeling or decorating of the old one, the interior treatment, both as to architectural detail and decoration and furnishing, is very important. Correct expression of decorative schemes is a difficult matter for the average person to handle. In view of this, we have published in "INTERIORS BEAUTIFUL" two hundred selected views of the interiors of successfully planned and decorated homes and give, in the captions under the illustrations, the scheme of decoration used.

Fourth revised edition, just off the press, is beautifully printed on enameled paper and has embossed paper cover. 112 pages. Size 7½ x 10.

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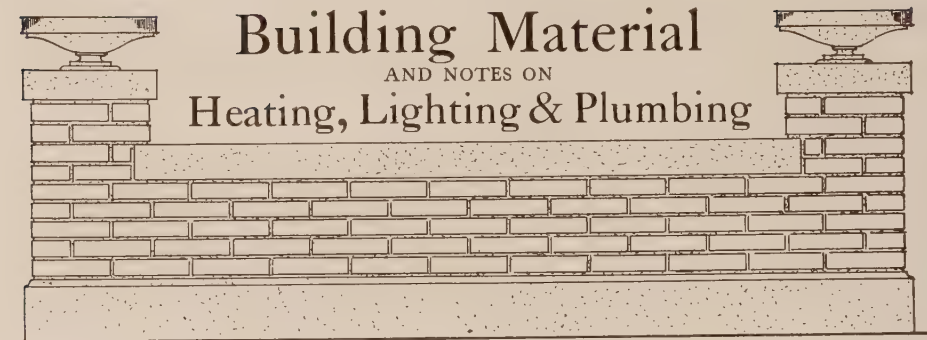
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M. L. KEITH

828 McKnight Bldg., Minneapolis, Minn.



"Air Is Free?"

FOOD is costly; housing is one of the problems of the day; pure water is a municipal problem; but "air is free," in the common thought. That is to say, we have not yet seriously undertaken our latest problem, and do not realize that clean "fresh" air at a comfortable temperature is not free to a single tax-payer. It is hardly attainable at any price to the lodger, the tenement dweller, the factory worker. "Out of doors" in the day time is indeed not for the workers of the city.

To the pioneer with the chinked log cabin or other crude form of habitation, air was free, altogether too free for the comfort to which we have sacrificed the pioneers' sense of freshness in the air.

In her book on "Conservation by Sanitation" Ellen H. Richards called air a neglected resource, and says, "man has learned very slowly the condition of his own safe living."

"Air in motion is necessary for human comfort and health. When man put a flat roof over his head and windows in the lower part of his room he began his downward career in health. Warm air rises into a cooler medium. Common sources of bad air give also warm air. Man's breath yields carbon dioxide, heat and moisture; man's body adds heat, moisture and odors. Lighting and heating, cooking, sweeping, dusting even walking on the floor, especially if carpeted, each adds its quota. The resulting gaseous mixture would readily escape if an opening were left." The one essential is a hot air shaft of sufficient capacity to take all the foul air rising and hot enough to keep up a good current: The failure of

the vent comes in expecting a cold air-shaft to "draw." "Because waste water runs by its own weight from the lowest point, and because carbon dioxide is heavier than air, the popular fallacy is almost ineradicable that waste air will go out at the bottom of the room if it has a chance. But the existence of an air duct is not sufficient unless there is power behind it. "Contrary to common opinion, foul air coming from bodies or lights always rises and strives to get out at the highest point, and if a sufficiently large and warmed outlet is furnished so as to keep the air warm until it gets to the roof there will be no trouble." As air cools in coming in contact with cool walls it sinks back.

"Under the crowded conditions of modern living, taking account of space, fuel, etc., it is estimated that to supply a family with fresh air costs the householder about one-fourth as much as food, only he does not find it in his bills."

Preparation of Surfaces for Painting.

John Upton.

To get good results in painting you must have good paint and a good painter, and most important of all a good surface to receive the paint.

The condition of the surface is most important and is quite frequently not given due consideration. The final results depend largely upon the thoroughness of the preparatory work.

The surface must be perfectly dry, not only dry on the surface, but the wood must be thoroughly seasoned. In many instances paint is applied to a seemingly dry surface but a close investigation would show that the wood is unseasoned and is dry only to a slight depth.



This Wolff Shower

one of the several Wolff models, will add an invigorating zest to the bath that will be a source of keen satisfaction throughout all the years it will be used. Wolff Showers, in common with other Wolff fixtures, are extra full value for the money. May be added to your initial bath equipment with little increase of cost, or at any time after fixtures have been installed.

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and let appropriate fixtures be a part of your building plans. Wolff fixtures have long been known for their high standard of quality and are easily obtainable anywhere. Your plumber has our complete catalogue and will be glad to furnish them.

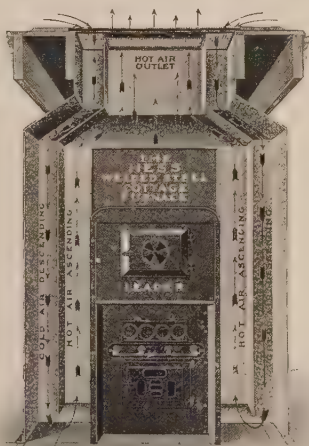
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Our regular furnace heats with separate pipes and registers, and will distribute heat to a larger number of rooms than the **pipeless**.

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Hess Warming & Ventilating Co., 1217 Tacoma Building, **Chicago, Ill.**

HESS Electric Family Dish Washers save time, hands and dishes.

"Made in U. S. A."

When the sun beats on the surface, the moisture must find an outlet, and forces the paint away from the wood, causing blisters, which afterward peel off. The application of paint to unseasoned wood hinders its further seasoning and also encourages decay. Again, though the wood may be seasoned and dry on the inside, if the surface is wet or damp when the paint is applied all sorts of bad results may follow. What little key there is between the paint and the wood is soon destroyed, and scaling, blistering, and peeling will soon be noticed.

The surface must be clean and free from dust, grease and other foreign matter. On new work it may be sufficient to use a painter's duster, or it may be necessary to do some sand papering and scraping before dusting.

In new work the pitch is apt to cause trouble and destroy any paint that comes in contact with it. Pitch is found in the knots and in other parts of the wood. In some kinds of wood, as yellow pine, it is present to such an extent as to require special care.

The effectual and complete stopping or killing of knots and pitch is a difficult matter. It can be done by leaving the new wood unpainted for six months or a year. By this exposure the resins are brought to the surface and are either washed away or hardened. Another way is to use the painter's blow torch to draw out the treacherous stuff so that it can be scraped off. Perhaps as much trouble in painting is caused by knots and pitchy wood as by any other one thing.

The object to be accomplished with knots is to prevent their appearance in the finished work by covering them over with something to make a coating between them and the paint.

The most common method is to coat all knots and other places where pitch appears with shellac varnish. For yellow pine, spruce, cypress, or any wood containing much sap, it is a good plan to mix a small amount of benzol (coal-tar naphtha) with the priming coat. This will dissolve the surface layer of resins and allow the paint pigment to penetrate into the fibers of the wood.

Before the second coat of paint is ap-

plied all cracks, nail-holes and bad joints should be well filled with putty. Where a very fine job is required, each coat should be rubbed with sand paper before the next one is applied, all dust being carefully removed.

In planning old work even greater care should be taken to prepare the surface. When paint has been on a house for a long time it becomes dead and full of small cracks. Moisture will then get under the paint and loosen it. If a new coat is applied to this old paint it will pull the old paint loose and you will have a case of peeling.

It may be necessary to use a blow torch to secure good results. Thorough scrubbing with soap and water may be a help. This will remove all dirt and grease which would destroy the bond between the new work and the old. The entire surface should be scraped or rubbed with a wire brush and rough places should be sand papered.

The preparation of the surface of old interior woodwork for repainting sometimes presents difficulties. It may have grease upon it which is very difficult to remove with soap and water. It may be so hard and glossy that the new paint will not adhere to it.

The usual method of washing and sand papering may not answer. In such a case Benzol may be used. If commercial Benzol is brushed on a hard painted surface and soon wiped off it will remove the grease and cut the gloss so that the new paint will flow out smoothly and give good results.

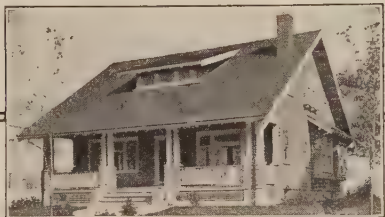
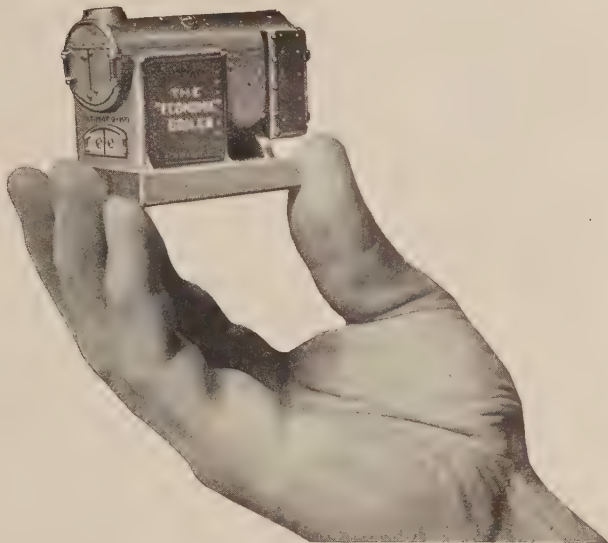
In painting plastered walls we should first give them a coat of glue sizing. This is made by dissolving five ounces of glue in one gallon of water. When this is dry the walls may be painted the desired color. This same glue sizing with about three times as much glue may be used on brick and stone walls as well.

Tin or other metal roofing and galvanized iron are difficult to paint, which is probably due to a very thin film of grease left on such material from the process of manufacture. This can be removed by exposing to the weather, but the better way with the tin roof, at least, is to scrub it with soap and water or with benzine and let it dry before painting.

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Put Your Home-Building Problems Up to Us, and We Will Give Them Careful Study and Reply Either Through These Columns Or by Mail When Stamp Is Enclosed.

What Can be Done with Logs?

W. H. H.—Your answer to J. S. in the August number was of great interest to me. We built our bungalow very nearly the same as he describes, had all our own logs very near us. It is 22x24 and the labor with chimney and one floor cost two hundred and fifty dollars. It has no finish except for the windows in-



"Reveille."

side, and only patent roofing over the roof boards. We expect to live in it, but cannot possibly heat it. It attracts people to such an extent that sometimes we have over fifty callers a day. We copied our bungalow after one built at Grand Lake Stream, Maine, and which cost much more than ours.

"Reveille," as we call our bungalow, is built on the Sislar road near Andover, Massachusetts, and has a Bird Sanctuary of 14 acres about it.

We are building a shingled bungalow



Log bungalow built in Maine.

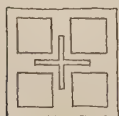
now, nearly the same plan, and costing but little more than the log one. We built the interior from a plan in Keith's and from advice you so kindly gave us some time ago. The living room is 22x15 feet and although it has only four rooms, it has 26 windows and is rather unique and very satisfactory.

Announcement.

We take pleasure in announcing the appointment of Walter C. Kimball, Inc., as eastern representative of this publication.

The New York address of KEITH'S MAGAZINE is now 432 4th avenue and eastern correspondents are invited to either call or address communications to Walter C. Kimball, Inc., and we can assure them of receiving every possible courtesy and service.

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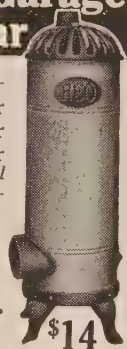
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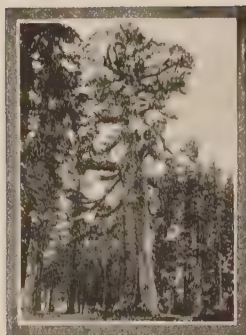
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WOODS

AND

HOW TO USE THEM



EDITOR'S NOTE.—When the building idea takes possession of you and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH'S staff of wood experts.

This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

The Individual Qualities of Certain Woods.



THE Government Bulletin on the Uses of Commercial Woods, in its report on the different varieties, gives some of the qualities of beech, birch and maple, which make these woods especially adaptable to specific uses.

Birch.

On account of the beautiful finish which it takes birch finds a very wide use as a finishing lumber in all kinds of building. The peculiar lustre of sweet birch when polished is due to the bright lining of the wood pores.

Sweet birch is a heavy wood, very strong and hard, compact, satiny and susceptible of a beautiful polish. The heartwood is a dark brown color tinged with red, the sap wood is light brown or yellow.

In the early days of its use small dimension stock cut from green logs gave much trouble because of its tendency to warp, though large timbers behave better. This tendency of birch lumber to warp gave one of the most difficult problems of the early millman.

He would pile his birch lumber, and upon it he would stack thousands of feet of other lumber. If he succeeded in superimposing a sufficient weight to hold the birch straight it slowly seasoned and gave no further trouble. Modern mills, with their improved methods, have no especial difficulty in seasoning birch.

Its use as an imitation of mahogany in addition to its use on its own merit makes birch one of the most widely used of all woods. The richly colored heartwood of the sweet birch is much sought by the cabinet maker, to whom the sapwood is worked as a different wood; for other reasons than simply that of color. Birch does not nail readily because of its tendency to split. When it is glued the best results are attained only when sapwood is glued to sapwood and heartwood to heartwood.

It is stiff and strong and, placed where it was not subject to alternate dryness and dampness, was used much in early New England ship building. In such unfavorable situations it is not durable, but in ordinary use it is physically equal to any wood. It is heavy, dense, of good milling qualities, lends itself to stains and fillers, and holds finish well.

Sweet birch is a satisfactory wood for flooring, both for its good looks and for long service. The wood is handsome, it stands well when thoroughly seasoned, and lasts a long time. The darker heartwood is much sought for use in parquet floors on account of its color. It is much used for all kinds of interior finish with exceedingly satisfactory results. Curly birch is often selected for special places, and finished to display the beautiful grain.

The species of birch known as the paper, or white birch, the Government Bulletin tells us, is one of the very few American species having now a stronger hold on life than when America was discov-

IXL ROCK MAPLE, BIRCH AND BEECH FLOORING



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ered. It is sometimes spoken of as a "fire tree," because of its habit of pushing in and occupying spaces left vacant by forest fires. Some tracts thus taken possession of within a century, or half a century, cover hundreds of square miles. The wood is light in weight, strong, hard, tough and compact. The sapwood is nearly white.

Maple.

Sugar or hard maple, as it is largely called, is little if any harder than other species of maple in this country. The wood is heavy, hard, strong, tough, narrow-ringed, compact and susceptible of a fine polish. It is used very largely for flooring, perhaps half of the output of maple being used for that purpose. During the "roller skating craze" in the eighties maple used for floors in these skating rinks made such a record for service under hard wear, that it acquired a permanent place in the lumber industry. Care in seasoning and laying it is necessary, for if placed green it shrinks badly, or if dry when laid and later allowed to become damp it swells up in ridges. But when properly managed it is one of the best and most lasting of floor woods. Instances have been cited, apparently well authenticated, where maple has given longer service under excessively trying conditions (stair landings in large stores) than marble.

In its early use it was laid with black walnut in alternate strips. The contrast of the woods was considered effective but was not satisfactory under severe use for the walnut was softer and wore more rapidly than the maple and the floors became uneven.

"Bird's-eye" Maple.

"Bird's-eye" maple is much sought for furniture and some times for interior finish, because of the pleasing growth called "bird's-eye" which adds much to the beauty of the wood when carefully selected and highly finished. The probable explanation of this figure, as given by the Bulletin, is that it is due to buds, which for some reason can not force their way through the bark, but remain just beneath

it year after year during long periods. The young wood is disturbed each succeeding season by the presence of the bud and grows around it in fantastic forms. When such a tree is converted into lumber, the saw cutting through the abnormal growths, exposes the crumpled edges of the tilted annual rings. Curly and wavy maple are accidental forms which frequently occur and are highly prized for furniture and interior finish.

Beech.

In speaking of beech the Bulletin says that it is difficult to work in the shop and is not especially attractive in color and figure, but it is a wood which is free from objectionable taste, so it is used for purposes where it will come in contact with food stuffs. Refrigerators and kitchen tables are made of beech, and culinary utensils.

The wood is very hard and ancient records tend to show that it was one of the earliest mediums upon which ancient writing was inscribed. The words "book" and "beech" were synonymous in some of the earliest written languages coming into Europe, due to the practice of writing on thin beech strips.

When thoroughly seasoned beech absorbs moisture in a smaller degree than almost any other American wood. Hence there is little shrinkage or swelling and it is an admirable material for building drawers in cabinets and chests. Its stiffness also commends it to the maker of furniture.

It ranks after maple and oak among the hardwoods employed for floors. "Its best service is perhaps given in factory and warehouse floors, where usage is rough and wear is great. The wheels of hand trucks produce little effect on a well seasoned beech floor."

In practically all of the uses of beech the heartwood is given preference. The sapwood is seldom desired. It is claimed by some manufacturers that the value of beech lumber would be increased and its uses extended if saw mills would exercise greater care in separating the sap from the heart lumber.



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For the many valuable suggestions you can receive from the plans, editorial matter and advertising in every issue of the National Builder.

It is to your interest to know about the quality and prices of the many different materials—both old and new—that you will buy when building or doing repair work.

The special feature of this magazine is a complete plan 24x36 inches, drawn to scale. This may be a house, bungalow, barn, two-flat building or double house. They are the same as an architect's blueprint and show front, side, rear elevations, floor plans and details with complete bill of materials.

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in the practical, easily understood articles on building construction and the many pages of reliable advertising. This advertising will introduce you to the best of the old standard materials and tell you all about the newer ones, which in many buildings replace the others, at greatly reduced costs.

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Building the House

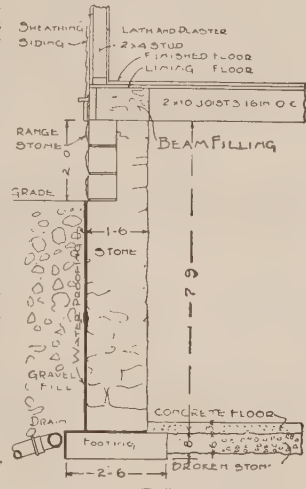
A Handbook Every Home-Builder Should Have

A great many homes are built without an architect's supervision. When this is the case, go out on the job with a copy of this book in your pocket, and you will not only be able to recognize faulty work, but you can give intelligent instructions to the workmen and show them how to do it right.

See that your home is built right. Look after the construction yourself, and with this book to guide you, faulty work will be detected and you can accomplish more and better results.

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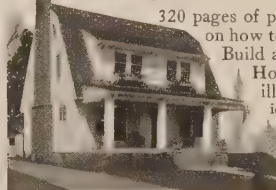
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THE
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New Britain, Conn.

SPLINTERS AND SHAVINGS

Manufacturers of Willow Seek Home Grown Willow Rods.

BECAUSE the European supply of willow rods has been largely cut off several American manufacturers of willow furniture and baskets have asked the Department of Agriculture for the addresses of persons in this country who have taken up willow growing. For some years the department has distributed willow cuttings of imported varieties with a view to developing the production of high-grade willow rods in the United States. The usual imports of willows come chiefly from England, Belgium, Holland, France and Germany, but these sources have been practically closed.

One manufacturer reports that Japanese osiers are taking the market formerly supplied by Germany, at a slightly higher price. Finished willow baskets from Japan have come in where split bamboo was the only Japanese basketware on sale before the war. As a consequence of the shortage of imported osiers, it is said, the price of American willows has increased and growers here are meeting with a heavy demand for their product.

Nearly two million willow cuttings have been distributed free by the Forest Service among State experiment stations, forest schools, and individual growers. The value of willow culture as a profitable means of utilizing overflow lands not suitable for other crops has been demonstrated, and the Department of Agriculture maintains a small willow holt on the government farm at Arlington, Va., for further tests and for the continued production of cuttings for free distribution. A bulletin on basket willow culture recently published by the department discusses the varieties and methods which have proved most satisfactory in this country.—*M. V. Lumberman.*

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* * *

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Ordnance Department, U. S. Army.

January 4, 1916.

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This examination is open to all men who are citizens of the United States and who are between twenty-five and forty-five years of age. This examination is held to secure eligibles with technical training and experience in design and construction of ordnance matériel, turrets, etc., of structural steel work (as applied to turrets) or mechanical engineering design. The applicant must show: (1) at least a high school education or its equivalent, (2) not less than four years' practical experience continuing within two years prior to application, (3) that he has been in charge of designing work with other draftsmen under him. Applicants will be rated: 40% on general and technical education and preliminary training, and 60% on experience and fitness. Especial weight will be given to experience in ordnance and turret work. Applicants must be physically qualified for the duties.

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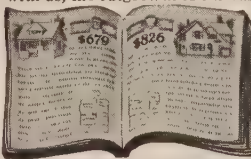
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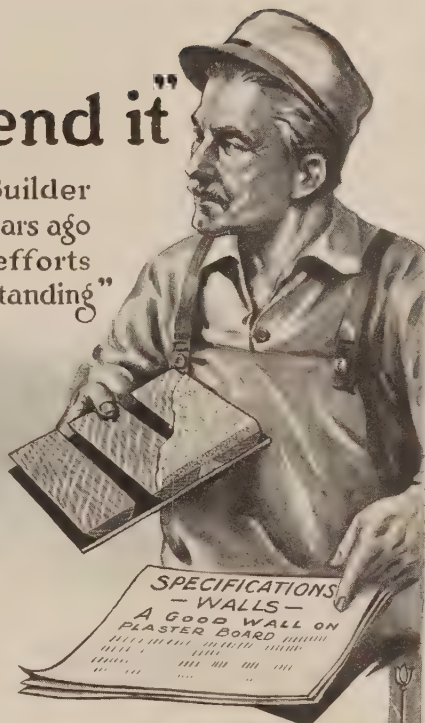
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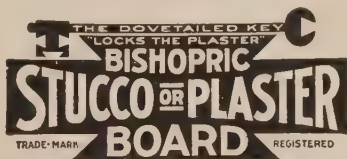


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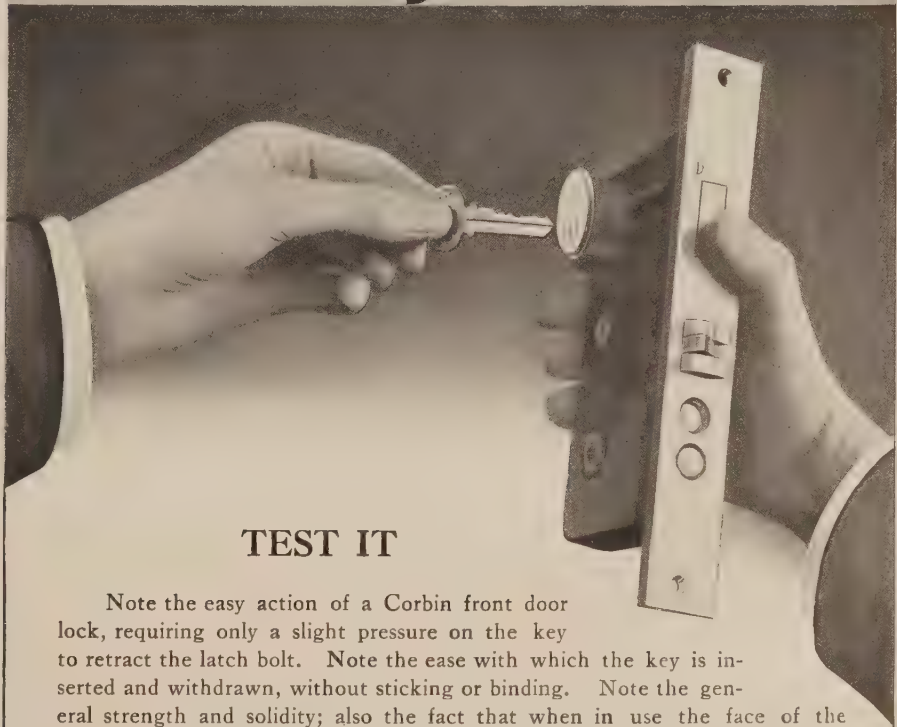
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(Continued on Page 77.)

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Just a Word

The Toast for 1916.

May Construction Continue and Destruction Stop.

The Chief Asset of the Home Builder.



IF YOU have decided to build a home do not wait until you are almost ready to "break ground" before knowing exactly what you are going to do. The home builder and his family should study their plans, if possible, through the full course of the seasons before the building is really begun. The housewife should, in her mind, live in her "new house" through the full round of her work and play. At Thanksgiving time she will think about how she will entertain the family party in her new house,—and remember that she must have a platter cupboard deep enough for her big turkey platter. At the Christmas season other needs will occur to her, small things not adding perceptibly to the cost, perhaps. It generally is no more work to put a cupboard or a door one place than another, but the result may make a vast difference to the housewife. The summer and the fruit growing season brings its own problems. Sometimes the change of season will show a somewhat better arrangement of the rooms than the original plan, either to get more sunshine or to catch a summer breeze.

After a house is finished there is often much criticism of the architect and of the builder; when as a matter of fact the home builders had not found out definitely for themselves what were their real needs, and only an architect of genius could have read their minds, and in the light of his own experience, have known what they really wanted.

Building materials, plumbing, heating plants, ventilation, etc., should be studied no less than the planning if the owner is to be satisfied. Now that Permanent Exhibits of building material are accessible in different parts of the country it is not difficult to study materials at first hand, and get the advantage of the best thought of the time on these subjects.

Here is our suggestion in case you expect to build a home in the next few years: If you do not already own a lot, select one now. Choice locations are increasing rather than decreasing in value, and it is acknowledged that the best way to save money is to have a place to put it. Then study your lot to see where the living room should be to get the best view, the best sunshine; the placing of the sleeping room for the best summer breeze. Know what you want, then those who know how, can get it for you. If there are questions you want to ask, Keith's Service Departments are ready to serve you. Don't hesitate to make use of them. Study your plans; live with them. Start something, and you will be surprised how soon you will be living in your own home.

KEITH'S MAGAZINE

ON HOME BUILDING

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An early Colonial entrance at Norfolk.

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A Colonial Story The Pierce-Nichols House

E. C. Bartholomew



HE old town of Salem is one of the most fascinating in New England, or in the country, for that matter, in its reminiscence of Colonial days. It was a seaport of some importance in the time of the Colonies, and many a sea captain sailed his ships to "the Indies" and brought them to port at his own counting house near

his own door. These ships came back laden with trophies, as many a Salem house at the present time bears witness.

To the visitor from the mid west, where a house of "the eighties" was scorned as out of date, these houses built a hundred years before are a revelation. He is taken into a best parlor where, after carefully opening the blinds, atten-



The Pierce-Nichols house at Salem—Built in 1782-1800.

tion is called to the mellow tone which the creamy white paint has acquired. He is shown the wall paper made in squares (instead of in strips or rolls as it comes now) which was brought over from Paris to finish the room when it was built. Sometimes the carpet on the floor is scarcely faded, thanks to the carefully drawn blinds.

The old part of the city is rich in traditions and historical reminiscence, nearly every old homestead treasuring heirlooms and memories; these old houses, themselves the most precious heirlooms of the present generation.

In no other period has the simple home achieved the stately dignity of the colonial mansions. They are not larger than other houses. They were seldom elaborate. While to us at this time the details of colonial work may seem elaborate and complicated to construct, so well was it managed in these old houses that it gives the effect of extreme simplicity. The details are so subordinated, and the scale is so in keeping with the design that it charms without demanding analysis.

There is, perhaps, no house of greater architectural interest in Salem, or in New England, than the Pierce-Nichols house on Federal Street. The exterior of the

house is notable. It is dignified, even imposing with its great pilasters on the corners. The third story adds dignity, yet avoids the feeling of too great height. The balustrade above the cornice gives a pleasing touch of formality. Like all houses of the Colonial period, the entrance is given especial emphasis

with its beautiful details.

The house was built by Samuel McIntire, the famous old Salem builder, and it is regarded by architects as the best example of McIntire's work now remaining. The house sets somewhat back from the street, unlike many houses of the period whose doors open directly on the sidewalk. An air of seclusion is given by the fence with its carefully detailed posts, which are highly dignified though char-



The mantel in the east parlor framing the mirror from Paris.

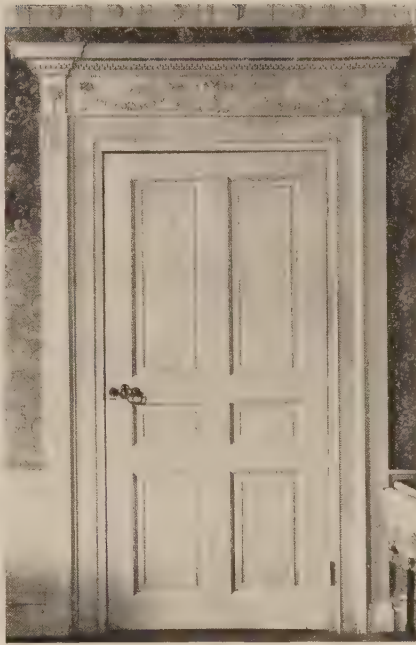
acteristic examples of McIntire's work. The two stately guardians at the gateway seem to bid intruders have a care how they trespass, and really make the formal entrance to the house.

At the right on entering the house is the living room, or parlor as they called it, twenty-six by sixteen feet, extending the whole width of the house. Architecturally there is, perhaps, no better room done under the influence of the Adam brothers, than this eastern parlor in the Pierce-

Nichols house, and the room over it is also noteworthy. These rooms were completed some years later than the rest of the house and are still called the "new part."

To get a full appreciation of this work one should measure and draw it all to scale as has been done by the students of the architectural schools. Probably most of the fine old Colonial houses of New England, as well as many in the south, and especially the interesting interiors, have been reproduced in this way by measured drawings. To the student such a house is a revelation, as he studies and measures, reproducing all of those wonderful details; the subtle curves of the mouldings and their grouping, the peculiarities of the dentil courses, even to the curious latch on the door.

Salem people realize the beauty of these old houses and are very generous in opening their homes to the interested visitor. I shall never forget one afternoon spent in the Pierce-Nichols house when, much to our delight, Madam asked us to go up on the roof and she would tell us something of the old house. From its flat roof we looked off, over the terraced garden to the sluggish river below, and noted a large but dilapidated building at one side. The house had been built, she said, considerably more than a hundred years before, and only the "old part,"—that at the left of the hall on entering,—had been



Door in the east parlor.

finished at the time. But when her great-grandmother had come as a bride at the opening of the century (1800), the "new part" had been finished to receive her. In that day in the place of that mild stream was a lordly river carrying sea-going ships. That building had been her great-grandfather's counting house, where his own ships in the East Indian trade had moored on their return voyages. There had been a great garden in his day, almost a park, terraced from the house

and its group of low buildings, through a rose-covered archway down to the river. One can picture it all, like a story from the past.

The "new part" of the house, she said, was considered very good. McIntire considered it one of his best pieces of work. The gilt framed mirror over the fireplace in the parlor had been ordered from Paris and the mantel built to receive it. Much of the furniture had been ordered from Paris at the same time for the bride of so long ago.

It is interesting to notice the way McIntire gave dignity to the features of the room. Not perhaps that we should want to do the same thing now, but that it produced the impression he sought to give. Outside the casing of the door, and framing it, is a pilaster treatment which receives the projections of the wainscot cap and base, and itself carries an architrave. A similar treatment on a smaller

scale in the mantel frames the Paris mirror and its architrave is carried as the cornice of the room, with pilasters of the full height framing the fireplace end of the room, the wainscot being carefully proportioned to the height of the pedestal base of the pilaster. The details were all very carefully worked out but not in

either side. The mantel, simple and dainty, has been an inspiration to designers and has been copied, in part at least, all over the country. It was the custom for many years to close these big old fireplaces and heat the rooms with stoves. The photograph shows the end of the room, which is entirely of wood and therefore white,



The fireplace end of the sleeping room.

the academic way in which it is approached at the present time; hence, perhaps, its charm which can not be reproduced.

The fireplace extends into the room the width of the chimney, leaving a niche recessed on either side. The low wainscot carried around the room has a delicate treatment in the mouldings of the cap and base.

The upper room is a charming bedroom. The fireplace end of the room is treated as a whole, the fireplace being recessed to give depth to the closets on

making a quaint contrast to the rest of the room.

To the architect such a house is vastly more than a well-preserved and beautiful old home. It is a type embodying the living spirit of the fine old craftsman, backed by the responsive owner. Colonial details are among the richest of the heritage which has come down to us. We may use them as jewels which we set in our modern life because we can not of ourselves produce anything more beautiful. The essence of their beauty eludes us if we try to copy in a slavish way.

Assembling Apartments on a City Lot

Nellie Ward Haller



BUILDING one apartment upon another is very common. Building one apartment beside another and placing three apartments in a satisfactory way on a narrow inside city lot is quite an accomplishment. Here is a little diagram of how it has been done, and in a very picturesque way. The families are surely much happier with each its bit of grass about it, than if the apartments had been made in the usual layer cake way, for it is hard to get enough "filling" to make it good.

The unsightly back yard is happily a thing of the past. We do not now need to avoid our neighbor's back door, and fear

to look in that direction. A hedge on the lot line gives ample protection. The alley at the rear is well kept,—a narrow street. Each house has a small lawn.

The first house here shown is of the type of construction favored in California, and is very well built. It has foundation walls built of cobble stones; the outside walls of planks and battens, giving a panelled effect. The rooms on the first floor are of a usual height, and the second floor has sleeping rooms under the dormers and sleeping porches in the gables. As will be seen by the photograph the sleeping porch may be closed by awnings. Even the flower boxes give them a protec-



The whole house is stained brown.



The walls become panelled surfaces.

tion, filled with their luxuriant growths.

The exterior as well as the interior of this house is most satisfying in color and in open spaces. The whole is stained brown, like old English oak. The woodwork and the joinery are unusually good in this house. All of the inside work is

quite as interesting as it is also the most simple, both in construction and in design. It is not built of studding in the usual way, but framed together in the old fashioned barn construction, with "four by fours" at the corners and at the partitions framed into the sill and the plates. This

held in place by brass screws. As shown by the photograph the whole house is a mass of windows, which are curtained with brown burlap. The furniture was built especially for the house and is in keeping with the simple lines and good craftsmanship of the house.

In this little group the house at the extreme rear of the lot is in its way

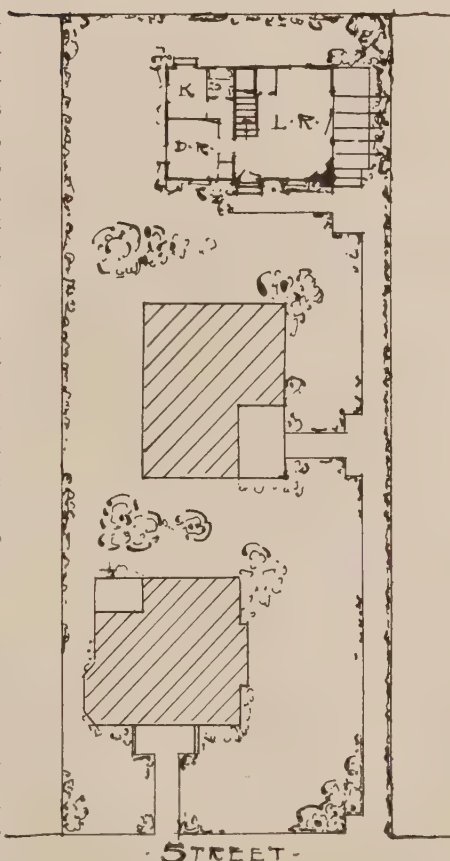


The small house at the rear of the lot.

gives a comparatively rigid frame irrespective of the outside covering. It is sheathed with planks, set upright, the edges butted together. These houses, built in sunny California, have a construction such as that used elsewhere for summer homes, rather flimsy perhaps, if intended to keep out a cold wind, but certainly picturesque and simple. The timber of the window sill is carried around the house and gives an additional bracing to the frame. Two-inch battens are placed over the edges of the planks, both outside and inside of the house. Boards at the top of the battens and for the base

of the room inside make the wall into a panelled surface, the panels extending to the plates under the rafters. The rafters themselves are exposed and with the sheathing over them forming the ceiling of the living room. In plan, the living room occupies about half of the house, and is open to the rafters, giving an unusual effect of spaciousness for so tiny a house. Stairs opposite the door go up to a balcony under the rafters and overlooking the room. This balcony space is only shut off by a movable screen, and between the windows in the two gables, makes a very airy sleeping apartment.

This house is called a four-room bungalow. The kitchen could hardly be accused of being a room, so tiny is it, yet the



necessary conveniences are there. The bathroom beside it is also tiny. These and a small bedroom are under the balcony. To give as much space as possible there is a wall bed in this bedroom, and it also has a closet. The living room serves as a dining room as well. In this room are two French windows and numerous small ones. The casement windows have very deep sills on the inside and under them book shelves have been built. The entire house is of wood, both inside and out, and it is all stained brown. The interior is quite unusual, and exceedingly attractive, but with an

elusive quality not possible to give in a photographic reproduction. The fireplace in the corner is built of brick. The probable cost of this house is given as less than a thousand dollars. While so simple and inexpensive it is unusually attractive with its vine covered pergola.

Set back almost the full depth of the lot, the long strip of green lawn rather enhances the interest in the small house. The second house in the middle of the lot turns a gable toward the street and faces directly on the private walk which is set so near the lot line that there is only room for a little hedge between it and the next lot. The house at the front is set quite near the other lot line and faces directly on the street.

The Sleeping Porch

Margaret Craig



Overhanging a luxuriant garden.



It is interesting, sometimes amusing, to notice the variety of places into which sleeping porches are tucked. Sometimes they are concealed by vines over the front entrance of the house,

sometimes they are under an eave overhanging a luxuriant garden. Oftentimes they are built over driveways or pergolas so as to catch the full sweep of the breezes. Many times these rooms are built on the top of a one-story house and resemble cabins on the deck of a ship.

Little extra expense need be used for these out-of-door sleeping rooms, and the comfort gained by the addition is almost indispensable



A simple screened porch.

to those who have once indulged in the luxury of sleeping in the open air.

In California, with its equable climate, almost every new house that is built has a sleeping porch,—an open room or screened room,—used permanently for a sleeping room. To overcome the discomfort of a blowing rain, these out-of-door rooms are often provided with movable windows that

can be set in when the few months rainy season arrives. Sometimes it is possible to build the porch on a corner that escapes the rains, and where the eaves can be extended to break their force.

The porch in this illustration is built over a veranda and its three exposed sides are supplied with movable screens.



A porch built over a veranda.

It is furnished with grass rugs, two iron bedsteads, several wicker chairs and a reading table. Inexpensive cretonne curtains at the windows add a cheerful note.

The next picture is of a porch that has a western exposure, and an uninterrupted view of rolling hills and picturesque eucalyptus trees. On starry nights, one might imagine he was in a nest in a

high tree, for all the slight obstruction in the landscape.

In the fifth picture the arrangement is made so that the screened-in room can be used as well as the railed porch, or both in conjunction.

The porch in the last illustration belongs to a brown plaster house. The beds



This porch gives an uninterrupted view.

compose the only furniture, but the outlook upon the garden and the flowering trees is most refreshing. The curtains here take the place of outside awnings and are raised by pulleys from the lower sills.

These rooms are built in every conceivable part of a house, but experience has proved that there are certain elements to be considered in the choice of location, as the rain, breezes, and sunshine.

If the porch is built on the eastern exposure of the house, the morning sun is very liable to awaken the sleeper rather early, so this must be taken into account



The screened porch and balcony.

with an eastern exposure, and many people will choose to place the sleeping porch on some other side of the house.

The direction of the prevailing breeze, either to be desired or avoided must be kept in mind in the placing of the porch.

So often the sleeping porch is added as an afterthought, or to fill new conditions, that these points of choice can not be very fully considered. The present construction of the house fixes quite definitely

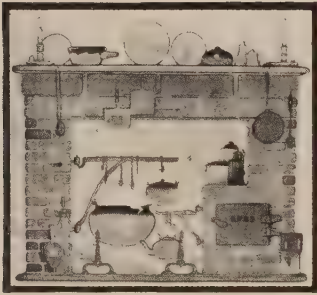


Curtains take the place of awnings.

where the new porch shall be placed at the least expense. For sleeping, a porch must be screened as a matter of course, until we succeed in vanquishing our ancient enemies, the fly and the mosquito.

Electric wiring for the porch is found not only practicable but extremely desirable. A little reading lamp may be placed on a table near the couch.

There are a few hardy spirits who consider heavy canvas curtains a sufficient protection inside of the screen, even during the severe winters of the north country. But to most people in the more severe climates the enclosing windows are necessary if the porch is to be used for sleeping through the greater part of the year. There is a tendency to make the windows permanent, and then to add storm sash, put a radiator in to heat the porch, and then the owner finds that he has added another room to the house, differing from the rest of the house only in the fact that two or three sides are of glass.



THE KITCHEN



The Kitchen Floor

Edith M. Jones

(Copyright, 1916, by Edith M. Jones)

IN a recent visit to one of the great hospitals of the country I was impressed with the wonderful equipment that was provided for the care of the sick. No expense, no effort, no detail, had been spared in the splendid buildings. The laboratories and diet kitchens were models of efficiency and beauty.

No expense seemed too great in this business of restoring health, and no detail too small for the most careful consideration.

Beautiful floors, tiled walls, metal or porcelain wherever possible. Not one crack or crevice that could be avoided. No useless, unrelated thing. Everything that was necessary and not one unnecessary piece of equipment.

This visit made a great impression upon me. I asked my-

self: Is this curative business of health more important than the preventive business?

It really would almost seem so, because apparently infinitely more care is given to the hospitals where the sick are cared for than to the homes where these



This floor is covered with linoleum made for battleships.



Color possibilities in linotiles.

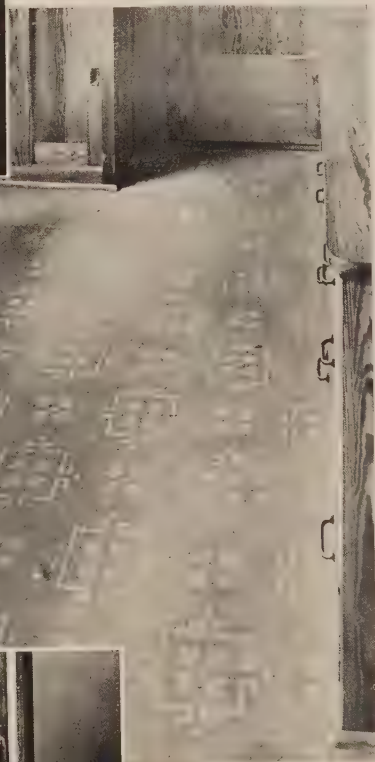
same people live when they are in their normal health.

Dr. Mayo of Rochester, in addressing a medical convention, said that "rest and relaxation, sanitary conditions and well-cooked foods would do away with medicines."

Great strides have been made along many lines of household problems in the last few years. Housewives have felt the needs and manufacturers have made great efforts to supply the de-

mands which they are making.

One stubborn and as yet unsolved problem, however, is the ideal kitchen floor. The perfect flooring has not as yet appeared despite the fact that there are many kinds of floors on the market of more or less value.



Inlaid linoleum.



Hexagonal tile for a kitchen floor.

The ideal kitchen floor must possess the following characteristics:

It must be

1. Resilient.
2. Non-slippery.
3. Silent under foot.
4. Warm.
5. Sanitary.

6. Easy to keep clean.
 7. Odorless.
 8. Artistic.
 9. Readily applicable to any type of base.
 10. Durable.
 11. Moderate in cost.
 - To which we might add:
 12. A minimum of joints, or seamless.
- The market affords:
- Terrazzo.
 - Tiles.
 - Marble.
 - Mosaic.
 - Wood.
 - Cork.
 - Rubber.
 - Linoleum.
 - Battleship linoleum.
 - Torgomont flooring.
 - Cement and composition.
 - Everlastic and Linotile flooring.

The list shows a large choice, but experience has proven that while each material has its good points, it is unsatisfactory in one respect to another, and is not the perfect floor. The architect tries one after another and is still looking patiently for the perfect flooring, which must combine the artistic and decorative possibilities of marble and mosaics, the low cost and durability of tiling, terrazzo and cement, the softness and elasticity of rubber and linoleum and the beautiful color possibilities of everlastic and linotiles. It should be without seam and it must eliminate the objectionable angles at the junction of the floor with the wall.

Every architect feels the need and is looking for this new material. It seems to me this perfect type will appear in some plastic form like cement, because the ideal floor must be seamless and must have a cove base. Surely the man or woman who succeeds in finding this perfect kitchen floor will be rewarded with fame and we hope with money.



Small tile makes a beautiful floor, but has many joints.

In the meantime if a floor must be chosen let the choice be for the floor that lays claim to the greatest number of the twelve necessary characteristics.

And if any one asks why a kitchen floor is of so much importance let us advise a visit to one of the up-to-date modern hospitals and then one can see for oneself how carefully matters of this sort are handled.

If hospital laboratories and diet kitchens require attention in every detail, surely the kitchen—the laboratory of the home—deserves as much consideration.

I am sure such a tour of inspection would convince any of us that the kitchen floor is a most important thing.

The Garden of Love

M. Pelton White



HAT'S what we call our back yard, "The Garden of Love"; and herewith follow the directions for the starting, growing and sharing thereof.

Twelve years ago our forty by forty foot back yard was virgin soil, part of a hillside swamp. When we bought, several months later, the tract had been drained, graded and cut into city lots. The rear of ours was bounded on the north and south by unimproved property; east, the new house and ten feet of side yard; west, a strip of worn poultry netting, the end of a neighbor's woodshed and a weather-beaten tight board fence.

Fortunately, a florist owed us a bill of twenty dollars. Seven of it went into the

"Garden of Love." We were sure of the love all right, but the twigs that we planted on that late March day didn't make much of a showing.

There were a dozen rose bushes—twenty-five cent size,—one each of Japanese cherry, crab-apple and camellia (none over two feet high), one Catonia aster and a few packages of seed—grass, sweet peas, pansy and nasturtium. A load of fertilizer (well rotted horse manure) added two dollars and a half to the first cost. I might as well state here that for the past four years, owing to the rapid growth of our city, and the dawn of a horseless age, we are almost entirely dependent on commercial fertilizers since five dollars a load for the stable article smells too strongly of money.

Twenty-five pounds of the commercial product, reinforced by mulch beds made of potato parings, tea leaves, corn husks, the ashes from an airtight wood heater (all meat bones are burned in it), lawn clippings, fallen leaves, etc., is sufficient to keep the ground in good condition. Nothing inside the house, or out, is wasted that will enrich soil, even to sour milk, which is an excellent rose food. Aside from the expense of fertilizer, the last money spent on the yard was eight years ago. A half dozen choice dahlia bulbs, two small English hollies cost us \$5.25.

From the beginning, the only straight lines in the garden have been the boundary lines. Each year finds more curves, or larger ones, and as the seasons pass the lawn diminishes in size, until, at the present time, as the plan will show, the



The flowering of the white broom.

original grass plot has dwindled to paths and a small clothes yard. Really flower beds are much less trouble than a lawn, for one can keep the dandelions out by turning over the earth.

My husband and I take the whole care of our yard. His working tools are the lawn mower and the hose; mine are pruning shears and a miniature spade with a sharp edge and a strong handle.

"Out of door exercise," advises the physician.

"But I can't waste the time to dress and parade up and down the street," objects the busy housewife.

Try my plan, dear lady. Spend from twenty minutes to half an hour in your own back yard each day. It means health, a saving of doctor's bills and an ever growing appreciation and love for Nature. If you choose there is a monetary return as well.

Come with me. Slip a storm coat over your house dress, if you please, and rubbers on your feet in case it is a typical Western Washington winter's day. We will go through the basement that I may provide myself with a pair of clippers. No visitor ever leaves the "Garden of Love" without an armful of flowers or greens, according to the season.

Behold the hollies on either side of the basement door. Isn't it wonderful how those twigs have grown into great, branching shrubs? That variegated leafed one is twelve feet high! We prune them at Christmas time. No gift is complete without its red-berried sprig of holly. It's the "Garden's" message of love to a friend.

But holly is not the only winter attraction. Branches from the big Catonia aster bush with its crimson berries delight the eye, and sprays of glossy-leaved English ivy—take notice that it has com-

pletely hidden the shabby woodshed and fence—adds a festive touch to no few homes and public meeting places.

"Stop! Ivy was not mentioned in your expense account."

True. I forgot to mention that all



Yellow and white Clematis covering Porch—Catonia Aster and Holly in foreground.

plants not included in that \$12.25—and they constitute by far the greater part of the garden—are the fruits of Love's garnering. Every one has a dear association. Take the ivy for instance. It was started from the clippings of an ivy-covered terrace belonging to my girlhood home. While we were waiting for it to root we hid the fence with nasturtiums and sweet peas.

That honeysuckle trailing over the clothes post will ever bring pleasant memories of a vine-snuggled cottage where we spent a summer vacation. Its owner, a sailor in his early days, spun us tales of windjammers afloat on Southern seas. Always will the spicy scent of honeysuckle remind me of "pinies" (pine apples) and things tropical. Our vine grew from a slip culled from the bouquet thrust into our hands at parting.

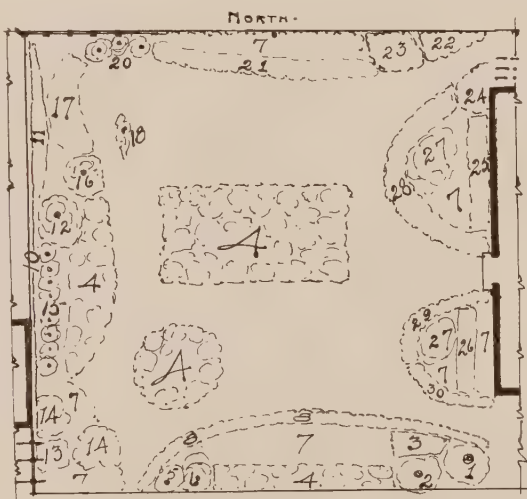
Speaking of slips, all our forty-five rose bushes, with the exception of the first dozen, all carnations, and several of our fifty odd varieties of dahlias have been grown from slips. Carnation settings may be started any time in pots in winter and in open beds in the summer. The shoots must be strong. Pinch off the bud end and tear (never cut) them from the old stalk. Plant deeply, leaving about an inch above ground, and keep well watered. This last instruction applies to all slips. One thorough drying out means their finish.

The beautiful pink climber that covers a part of the basement wall bespeaks the thoughtfulness of a friend while on a motor trip a few years ago. She particularly admired a rose, with a long pointed bud, in an armful of flowers that had been given her. Remembering the "Garden," she kept it alive until the

owner's return. See its thank offering.

The friend, alas, has gone on the long journey from which there is no return, but the rose of Love is a constant reminder of happy days gone by. Nor is this rose the only treasure whose joy-

giving qualities are tempered with sadness. The stately hollyhocks were grown from seed sent by an inmate of an old ladies' home. She gathered them from the bloom stalks that cheered as they nodded brightly in front of her lonely window. The loganberry was a gift from our washerwoman. The donor of the daffodil bulbs calls the border of blooms "the milky way," but her sightless eyes



Plan of "The Garden of Love."

- | | |
|---|----------------------------|
| 1. Sacred Japanese Cherry. | 16. Pink Japanese Camilla. |
| 2. Japanese Crab Apple. | 17. Rhubarb. |
| 3. Anemones. | 18. Honeysuckle. |
| 4. Dahlias. | 19. Border of Daffodils. |
| 5. Yellow Scotch Broom. | 20. Giant Gooseberries |
| 6. White Scotch Broom. | (3 bushes.) |
| 7. Roses. | 21. Carnations. |
| 8. Polyanthus border (4 varieties.) | 22. Catonia Aster. |
| 9. Ferns. | 23. Garden Hyacinth. |
| 10. English Ivy covering shed and back fence. | 24. Yellow Clematis. |
| 11. Loganberry, trained over ivy. | 25. White Clematis. |
| 12. Norway Maple. | 26. Gladioli. |
| 13. Lavender. | 27. Holly. |
| 14. Lilacs. | 28. Glove Pinks. |
| 15. Double Pink Hollyhocks. | 29. Border (name unknown.) |
| | 30. Single Pinks. |

have never beheld the beauty of the flowers.

There is no waste space in the yard. Ferns, the loot from many a woody tramp, grow luxuriantly in the dark recess beneath the vine-covered porch. Rose cuttings, the seedlings of Scotch broom, Catonia aster and clematis are tucked in here and there, allowed a two year's growth and at the end of the time either given away or sold to a florist, who also takes the left-over dahlia bulbs. We sell from five to ten dollars worth of stuff a year.

Exchange of dahlia bulbs has given us a good assortment. We still have tubers

from the original stock. They have never "run out." Before the first frost stalks are cut to within six inches of the ground. The bulbs are dug, freed from earth, packed in barrels and covered with sand.

"To have and to hold" is not all of Love. True Love hath a way of spilling itself. Not only do the cut flowers, literally hundreds of them, brighten school, hospital, church, home, the house of mirth and the house of death, but seed,

slip and plant are joyfully given to the making of other gardens. Neighboring yards, and many others, belonging to friends in different parts of the city and suburbs are but younger generations of the "Garden of Love."

Truly, he who would derive great pleasure from his garden must start it from seedling and twig and grow up with it. Buying the ready-made article is like adopting a family. You lose the feeling of that mine-own-child sentiment.

Preparing Soil for Potted Plants



EVERYTHING in fresh vegetation which you wish to discard, except diseased plants, if properly prepared may be used to fertilize the soil in a little corner of the garden. Lawn clippings, vegetables which cannot be used, refuse from the kitchen, foliage and stocks from dahlias and other plants may not only be disposed of, but made useful in the preparation of a soil heap which will always be ready for use.

The best time to make an enriched soil heap is in the spring. It should stand for a year or eighteen months before it is fully ready for use. Having once started it no gardener will allow himself to be without his little spot of prepared soil.

In order to make an enriched soil heap use solid layers of the materials in rotation. Use the turned over sod with a layer of good garden soil and a layer of sharp sand, another of leaf mould, one of decayed stable manure, and a layer of green forage already mentioned, any kind of fresh vegetation which you wish to discard. Thin dustings of ground bone and lime should be put between every other layer. The layers of sod should be

more frequent than the other materials. This heap should remain undisturbed for twelve months but the following spring it should be completely turned several times to thoroughly mix the different ingredients. The heap should be turned again at least twice during the summer. When ready, the soil that is taken out for use should be thrown through a sieve to remove any stones or lumps.

When bulbs are to be potted a sufficient quantity of soil is taken from the heap already prepared. The right kind of soil may be purchased from the greenhouses by those who do not have gardens, at a moderate price. One should not attempt to use soil from window boxes or from pots in which plants have been grown, for its vitality has been spent and such an attempt only invites failure.

There are excellent books which give some of nature's secrets in the preparation of the soil and the treatment of growing things. One may have anything, it seems, from flowering bulbs to freshly grown salads. The winter garden seems to be possible even to the amateur garden enthusiast.

The Child's Room

With Some Legends for Other Rooms

John A. Knowles



HE child lives in a world of his own, furnished and peopled in his own way, from which he reluctantly withdraws himself at the persuasion or behest of the "grown-ups," to demand of them amusement equal to that which his own world supplies. If he has not a room of his own, "Mother" is scandalized to have him crawl under the bed in his clean white

stencilling gives in a simple yet satisfactory way.

Using this easy, yet effective, mode of decoration one need not search long for subjects to please the childish fancy, which may at the same time satisfy the "grown-up's" artistic sense as proper associates for the children, for there is a whole mine of histories, both tragic and comic, from little Bo Peep's sad loss and



Stencil frieze for the child's room.

suit, or retire behind the couch, where his friendly fancies come to play with him.

The "Mother who understands" tries to fit up a child's room, to bring it into his own world, if the house possesses such a delightful retreat where to spend the

"Pause in the day's occupation,
Which is known as the children's hour."

During childhood the most forceful appeal is made through the eye to the brain, and this is especially true of the broad masses of color free from unnecessary details and the bold poster effects which

the disappointment of Mother Hubbard's dog at the non-appearance of the viands, to the self congratulation of Master J. Horner, and Miss Muffit's shock at the unexpected appearance of the spider. These can all be set forth in plain and unmistakable terms and give delight to both old and young. Moreover, so many children's books can be bought nowadays with these nursery rhymes done in broad masses of flat color and therefore admirably fitted for being used for stencilled work, that the amateur decorator will experience no difficulty in carrying them out. Enlargements from the illu-

strations may be made from which the stencils can be prepared. This puts the whole realm of fairy land at the disposal of the decorator. Directions for stencilling at home will be given later in this series.

Many more illustrations of this kind appear in Lear's delightful "Book of Nonsense" which Ruskin said he would place first in his list of best hundred books; and which has been the delight of two generations of old and young children, as well as in Kate Greenway's children's books, "Alice in Wonderland," and all of the marvels of modern child illustration.

Stencilling has all sorts of possibilities, in bringing the home keeper in touch with her own "friendly spirits" as they live in her favorite books, or the man of the house with his pipe dreams. Stencilled decorations, if they are made by the homekeeper, need not be done all at once. After they have all been carefully planned the bits may be added from time to time, nor can it spoil if left for weeks or months. It can be taken up again where it was left off, or something more added where, after due consideration and discussion over the fireside when the more serious work of the day is completed, and after seeing and, what is more to the point, **living** with the work from day to day, you have eventually come to the conclusion that something could be added or improved.

Then again, if you have a literary turn and like Silas Wegg feel like dropping into poetry in your decorative schemes, you take down some favorite and well-thumbed volume, to look up that line or trite couplet you think would be so appropriate for the living room maybe, or perhaps the den. And after all nothing looks quainter nor gives more unexpected pleasure to the beholder who sees it for their first time, than some line which is apt

and appropriate inscribed on wall or frieze, or referring to the purpose of the room to which it belongs. In the music room, for instance, one could put:

"Here will we sit and let the strains of music creep in our ears."—*Merchant of Venice*.

or,

"Come, the song we had last night."
—*Twelfth Night*.

For an Entrance Hall:

"The ornaments of the house are the friends who frequent it."

Dining Room:

"We ha'e meat an' we can eat sae let the Lord be thankit." — *Burns. Selkirk Grace*.

A Bedroom:

"Sleep steal me awhile from mine own company."—*Midsummer Night's Dream*.

or,

"O soothest sleep if so it please thee close my willing eyes."—*Keats*.

The Den:

"I love old friends, old times, old manners, old books, old wine."—*Goldsmith*.

or,

"With pipe and book at close of day,
What can be better mortal say?"—*Le Gallienne*.

A block of letters, if designed in a posterous or picturesque way, may be quite as decorative as a pictured object. A couplet, a legend, or a text may be so designed as to please the eye, just as would, for instance a frieze of trees. A second glance adds the meaning of the legend to the beauty of the block of letters designed. The appeal is rather "bookish," perhaps, yet very quaint and delightful to those for whom it has an especial meaning. Such decoration is especially appropriate for the more intimate rooms of the house, for the fireplace where the family assembles, for the den, or for one's own rooms.

As We Like It

Mrs. J. Edward Buckingham

(Contributed by one of Keith's readers)



THE site chosen for "As We Like It" is a lot 100 ft. by 125 ft., near the top of a hill. The lot is terraced to the street on the north, and commands a good view of the harbor and a small mountain beyond.

The simple requirements of the owners led them to plan a house of the semi-bungalow type with many windows. The house is one and a half story, shingled, and has a full concrete basement. The interior is planned to utilize every inch of floor space to the best advantage.

The main entrance is strongly accented by a little pergola extending from a recessed porch.

The front door opens directly into the

house, for the music room, library, and dining room are thrown together by six and eight foot openings and are virtually one great room. Around the walls runs a six-foot panelled wainscot of fir stained a soft brown. All of the woodwork is fir stained brown, which treatment brings out the grain of the wood in an interesting manner.

Above the wainscot in the music room, which is also the living room, an imported scenic paper, in brown, blues, and yellows in faded tones portraying "Carot" trees is used, which harmonizes perfectly with the woodwork and gives an ideal background to the various musical instruments and upholstered furniture. A



The entrance is accented by the pergola porch.

pressed brick fireplace is the center of comfort. An old blue piece of pottery and a cushion of the same color add bits of color to the room and contrast with a Persian rug. Dull brass andirons and candlesticks are used.

In the library and dining room a soft brown paper is used above the wainscot and serves as a good wall on which to place a collection of water colors. The

half dozen blue plates. The quaint table which measures 20x40 inches, was specially designed from white oak and the top left unstained; it is on casters and can be moved at will to any part of the room. A bench to match fits under the table when not in use.

The hall and stairway was the real problem of the house, but the plan worked out and adopted is simplicity itself and



The music room with its frieze of "Corot" trees.

bookcases and china closet, also some seats are "built in." The furniture is fumed oak in Craftsman design and stained wicker. In the library is an old Sivas rug, thick and silky and bright, which together with the color in the bindings of the books, brightens up the room to a pleasing degree.

The kitchen is tiny and Dutch—everything within reach. Around the walls is a tiled paper with a frieze of little blue windmills and boats. A plate rail holds a

has proved satisfactory in the real test: that of constant usage. The music room, kitchen, and cellar doors all open into the hall beyond the music room, thus making a passageway between the two principal downstairs rooms from the cellar where the fuel is kept without passing through other rooms. The stairway is four feet wide and left open to the roof which is a good feature, as heavy pieces of furniture may be moved with ease up and down stairs. Rugs, bedding and curtains

may be taken downstairs, through the cellar way, and aired upon the lawn without the dust flying in other parts of the house.



"As We Like It."

On the second floor there are three bedrooms, a bathroom and a store-room.

The owner's bedroom has large closets at either end. This room is finished in ivory enamel, and the plastered walls tinted. The furniture will be ivory enamel and wicker. At the casement windows are cretonne curtains in old blue and green. An old blue rug of Saxony is on the floor. Japanese block prints adorn the otherwise bare walls.

One room is furnished after the ideas of Gustav Stickly: a plain rug on the floor, coarse curtains at the windows, stained oak furniture, and on the rough plastered walls a few block prints as in the former room.

The basement is whitewashed and sunny, has a laundry, and places for gar-

den tools, vegetables, canned fruit, and fuel. The house is piped for steam heat.

An attractive setting for the house is a group of evergreens at the back of the lot and plantings of shrubs and flowers around the base. Altogether we enjoy our little home "As We Like It," many ideas and plans for which we gleaned from Keith's Magazine, and then wove them into a plan to



Evergreens give a setting.

suit our needs.

Below is a table of costs, as built in western Washington:

Excavating	\$13.00
Lumber and materials.....	460.00
Paint and stain	200.00
Wiring	50.00
Plumbing	235.00
Mason	500.00
Labor	550.00
Hardware	90.00
Paper	40.00
Millwork	180.00
	<hr/>
	\$2,318.00

To Grow Good Sweet Potatoes

The common sweet potato which finds a place on the table in the North is not considered good eating by Southerners, and this suggestion is made. Write now to some southern friend or nurseryman for roots, small enough to be sent by mail, of a variety of the sweet potato that stands for quality. Start these in a hot bed, take off the sprouts, root them and plant out of doors in sandy soil at the end of May.

A Fire-Safe House to Be Given Away



HE management of the Complete Building Show, which is held at Cleveland during February, has taken a novel way of demonstrating building materials. On the Lake Shore boulevard the house shown in the accompanying illustrations has been built in which a large number of materials have a practical demonstration. The Building Show is conducted by fifty prominent manufacturers and dealers, with the avowed purpose of an educational campaign. Equipment as well as materials are shown in the "Prize House" which, when it has served its purpose in the showing of materials, will be the award in a novel voting contest conducted during the progress of the show.

The house was designed by Edward A. Ruggles, architect of Cleveland, using as many different materials as could be

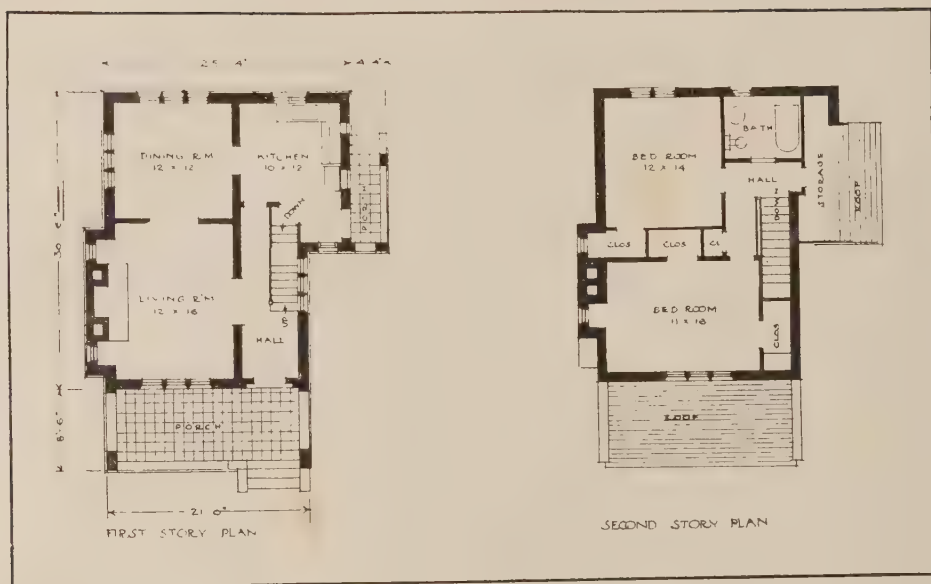
done consistently. The exterior walls are of hollow tile and the first story faced with brick. Above that the tile is plastered with cream white stucco. Both natural and cement stone are used in the building.

The floor of the first story is constructed of cement on a self-centered expanded metal lath, carried upon steel beams especially built up to provide lightness and strength. This gives an effective fire-stop between the basement and the upper stories. The stairways are protected against fire by the use of metal lath and plaster. Asbestos and gypsum are used in the walls where it could be done to advantage. The second story floor and roof framing are of wood with the usual construction. The roof is covered with red Spanish tile.

The housewife's convenience has been



The prize house was built to demonstrate building materials.



studied in the installation of various devices. The icebox is filled from the rear porch. Considerable annoyance has been eliminated by the installation of boxes to contain the gas, water and electric meters, all of which may be read from the outside of the building. A patent garbage receiver is installed making it unnecessary to leave the kitchen with each bit of garbage, and an incinerator has been installed in the basement to provide against the uncertainties of garbage collection in the suburbs. One of the new disappearing "door-beds" has been placed in one of the sleeping rooms, making it available

as a sitting room or den.

Visitors to the Building Show are asked to vote on the various materials and equipment exhibited. A careful study of the exhibit is necessary in order to vote intelligently. In this way the contest emphasizes the educational element underlying the enterprise.

This house will be given free to the winner of the voting contest after it has served for purposes of demonstration in connection with the Building Show. The award of the prize house in this way links the contest very directly with the exhibits.

Substantial Dignity in a Home

A BRICK house gives a feeling of substantial dignity. The home here illustrated has in addition, the accent of the entrance, with its carved verge board and timber treatment. Above the entrance is a great bay of windows, and the front gable overhanging so that it is

flush with the second story bay. The gable ends are half timber and stucco, and the verge boards of the roof and gables, while not carved, are all carefully detailed. A brick house always makes an excellent background for vines and English ivy, and the summer finds this home



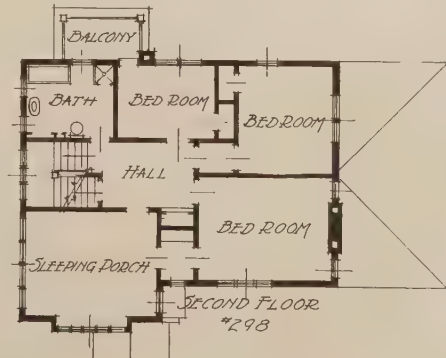
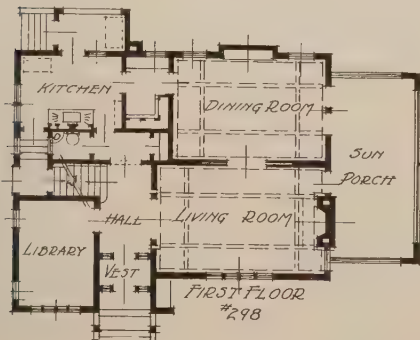
The entrance has especial interest.

Lindstrom & Almars, Archts.

a mass of greenery. A trellis has been built for vines which do not cling to the wall. An English motif, while not conspicuous, has been observed throughout the house.

The plan shows careful study and has achieved a very satisfactory arrangement. In our small private homes we are accustomed to accept the traditions of large establishments and to place the stairway in the most conspicuous place where it is seen first on entering the house. As a

matter of fact, in most homes where large entertaining is not an especial feature, the placing of the stairs is a matter of no moment to the entering guest. He is shown upstairs, if that is desired. Otherwise there is no necessity for the stairs to crowd the entrance space. In this case the stairs are set back, accessible but not obtrusive. Under the stairs is a lavatory on one side of the passage and a coat closet on the other, and beyond it a door to the kitchen. This gives easy access to



the front door from the kitchen. A portier may be so hung as to screen the passage way.

At the left of the hall on entering is a small library or den. A columned opening separates the living room from the hall on the right, with book cases on either side of the opening. The living room has a large fireplace at the farther end of the room with a recessed radiator under the window. The ceiling is beamed, and a group of windows breaks the side wall overlooking the street. The sun porch opens from both living and dining rooms with glass doors. Wide sliding doors connect the dining room with the living room. Opposite these doors is a handsome sideboard and china closet, with leaded glass. The walls are panelled with a plate shelf carried around the room.

Between the dining room and the kitchen is a butler's pantry, with a work table under the window and good cupboard space. The kitchen is lighted from two sides. A one-piece sink is in the kitchen, with enameled iron drain

boards on each side and wall cupboards over. The clothes chute opens from the bathroom on the second floor to the laundry in the basement, with a door from the kitchen. The refrigerator has a place on the rear porch. The basement stairs are under the main stairs. Four steps lead from the kitchen to the platform at the grade level where a door from the outside opens directly to the basement.

On the second floor there are three bed rooms and a sleeping porch, closets and a balcony opening from the rear bed room. In the bathroom a shower is installed beside the tub. The plumbing comes directly over that in the kitchen.

On the third floor is a servant's room, closet, and storage, beside a large amusement room. The basement has the usual accommodations.

The floors of the vestibule, porch and bathroom are of encaustic tile. The sun porch is ceiled with Washington fir.

The exterior walls are faced with vitrified brown brick, with English half timber work and cement stucco in the gables, and the roof is of green slate.

A Well-Planned Home of Hollow Tile

HERE is one architect's conception of an ideal home, well planned and well built. The construction is of hollow tile as a fire-resisting material which at the same time makes a building which is easy to heat. The lines are simple; the surfaces broken by well grouped windows which insure an abundance of light and air in the house with a wide overhang of the eaves.

The broad side of the house faces the street; the entrance with its protecting hood under the wide group of windows making the central feature. As this would indicate, the hall is the center of the interior arrangement. Wide openings

throw the main rooms of the first floor together giving an ideal arrangement for entertaining one's friends.

The living room is well proportioned and of good size. Its wall spaces have been well studied with reference to the furniture which is to be placed. The group of casement windows on the side wall are high enough to allow a davenport to be placed under them, while the group of windows overlooking the street are full length. The great fireplace extends to the ceiling, with the French door to the sun room beside it. In the sun room is a smaller fireplace which will make this also a cosy room in cool



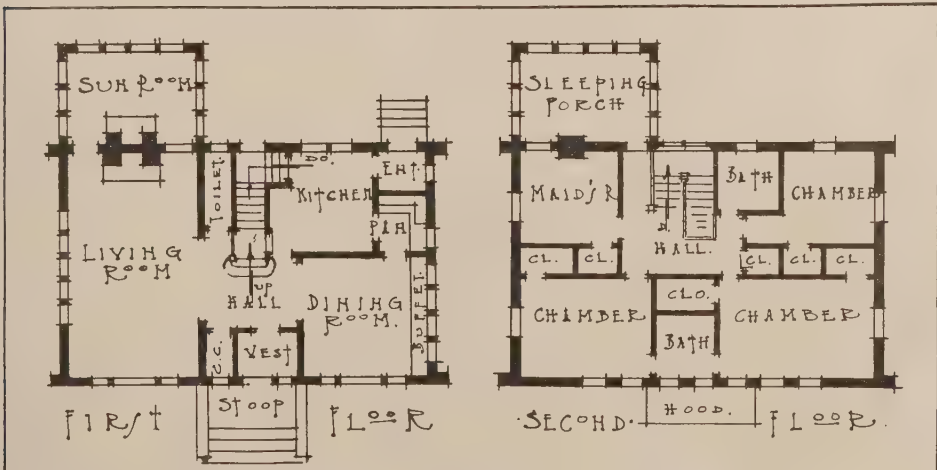
The lines of the house are simple, with a wide overhang of the eaves.

W. W. Purdy, Archt.

mornings and evenings, probably giving it the use of a den.

On the other side of the hall is the dining room with its simply designed buffet extending under the group of windows across the entire end of the room, providing drawers, ample for the storage of linen, silverware, etcetera. A small butler's pantry is between the dining room and kitchen, giving a good work table with bins and drawers under and ample cupboard space filling one side. In the kitchen the wall space has been arranged to accommodate a large sink

with its drain boards, the gas range, drop table, a clothes chute, and a small cupboard. The walls of the kitchen, entry and pantry are of hard plaster marked in a tile pattern. Linoleum is on the floor. The refrigerator is placed in the entry. The basement stairs are under the main stairs with an entrance at the grade level. Steps from the kitchen lead to this landing. The third step of the main stairs is a landing, which may be reached directly from the kitchen, while a door connects the kitchen with the front hall. Under the second run of the



main stairs is placed a toilet room. There is a coat closet beside the vestibule. On the second floor the chambers are all of good size, well lighted and with cross ventilation. The wall space has been carefully studied for the placing of the furniture. The two front chambers form a suite with a private bath connecting them, and a second closet opening from one of the rooms. All of the rooms have good closets with one opening from the hall. A second bath room is placed over the kitchen. The sleeping porch is reached by a short hall.

The floors and finish of the living and dining rooms are of quarter sawn white oak. The floors of the vestibule, sun room and toilet room are of tile, and the two baths on the second floor have tile wainscot and floors, with white enamel

trim. The second floor has birch finish stained mahogany, throughout.

The basement is so arranged as to have a good sized amusement room. It has the usual laundry, fruit and vegetable rooms and furnace room. The fuel rooms are under the sun room, which is both fire and dust proof. The basement rooms are all plastered and the amusement room has a wood floor and the walls are tinted.

The walls of the house are built of hollow tile covered with white cement plaster. The roof is covered with red tile. The architect estimates that the house would be built in his locality for \$8,000, and that the same design built with cement plaster over metal lath with shingle or slate roof, and omitting some of the interior details should be built for \$6,500.

A Popular Bungalow Design

THE plan and photograph with this article represent an interesting creation in bungalow art. It is a picture which stimulates the desire for the bungalow home. The owner may well

ask: "In what type of home-building architecture are to be found more attractive, more interesting and more charming features than in the true bungalow type?"

Quality of design is very important and

it need not be costly design. The clean-cut sweeping arch of the front is the key note in this composition and every other feature of the home must be in tune with its expression.

Attention may be called to the brackets under the arch at the house wall; also to the low sweep of the arch, the long line effect in the mass, the studied



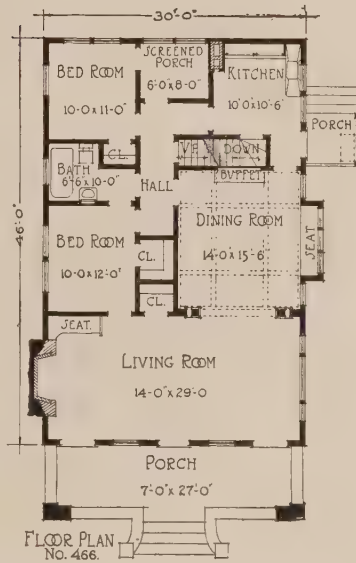
It stimulates the desire for a bungalow home.

Jud Yoho, Archt.

irregularity of the window positions. There is interest in the clinker balustrade, the clinker porch wall, and the clever porch design at the sides of the main door.

Speaking now of the interior. The floor plan embodied in the text herewith, illustrates a good example of the general type of bungalow plans. The living room is the "great room" stretching, as it does, clear across the width of the house and having dimensions of fourteen by twenty-nine feet. The dining room is large. The two bedrooms are separated by the bathroom. A communicating hall leads to bedrooms, dining room, rear porch, kitchen and attic stair. This hall is very well placed and gives a serving passage of excellent arrangement as will be seen on the plan.

There is ample closet provision; note



how even the bath room line is broken to provide for a closet, and yet this bath room is not cramped by this bit of scheming. The dining room is well placed, as it is closely related to every other part of the house. The kitchen has a stair directly down to the basement, which is a great convenience; the light is admitted on one side, and there is shown good cupboard space.

Fine bookcases, with leaded glass are built in between living room and dining room. There is plenty of light in both living room and dining room as indeed the window space is unusually large. All the interior finish is designed on simple lines, but effective and in keeping with the rest of the work.

Oak floors are laid in the two large rooms. It is designed to be heated by means of a hot air furnace.

Boulders and Stucco

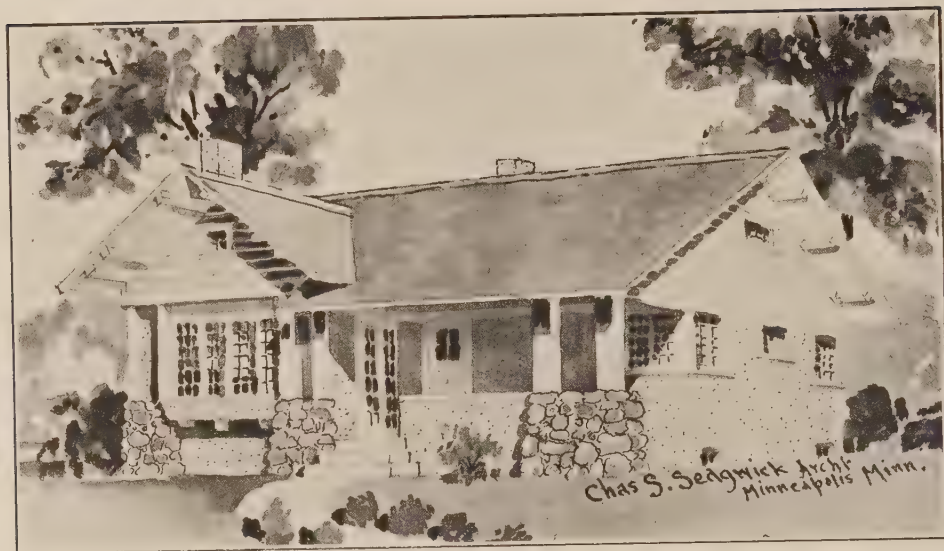
FIVE rooms and under thirty feet in width, makes a house suited to the width of a narrow city lot, and able to accommodate the so-called average family. This bungalow is 29 by 37 feet, with wide projecting eaves and exposed timbers supporting them.

Except in the gables the outside studing is ten feet. The outside walls are sheathed, covered with building paper, and cemented on metal lath from the line of the grade to the heads of the windows. Above this the walls are covered with a wide drop siding.

Square timber posts support the porch roof and rest on boulder piers. The combination of boulders and cement is always effective. The flower boxes and small panes of glass add to the picturesque effect.

The cement is very light in color and all of the outside trimmings are painted white or a very light cream color while the shingles of the roof are stained a dark red, giving an exceedingly attractive color scheme.

The entrance from the porch is into a small central hall, from which the living



The combination of boulders and stucco is always effective.

Chas. S. Sedgwick, Archt.

room is entered through a columned opening. The living room is 12 by 15 feet, a very satisfactory size. The fireplace is on one side of the room and a wide group

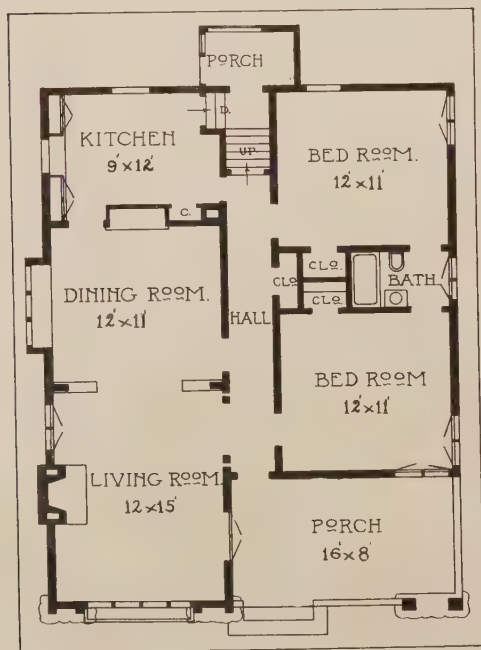
of windows at the front. The separation between the living room and dining room is indicated rather than actual. With the wide arched opening between, these two rooms are readily thrown together and used as one large room. The dining room has a group of windows in a bay and a built-in sideboard opposite the living room. Beyond is the kitchen with built-in cupboards and sink.

At the end of the hall, stairs lead up to the attic storage space. Under these are the basement stairs, with an entrance and porch at the grade level.

The other side of the house is devoted entirely to the sleeping rooms. Two bedrooms open off the central hall. Both rooms have access to the bath room. Each has a closet and both have cross ventilation. A good closet opens from the hall.

The main part of the house may be finished in Washington fir, yellow pine, or birch, with very little difference in the cost between them. The floors are all finished in natural oak.

There is a full basement under the



house with ample space for laundry, heating apparatus, fuel rooms, storage, etc. The architect estimates the cost of this house at from \$3,200 to \$3,500, exclusive of heating. The plumbing is included in this figure.

The construction is thorough and substantial, the outside walls being sheathed, papered and cemented on the outside, and back plastered for additional warmth. Drop siding fills the gables above the heads of the windows.

Advantages of a Story-and-a-Half House

A MODERN story-and-a-half house stands midway between the bungalow and the typical full two-story house. It is neither one nor the other, but combines the advantages of both.

In the story-and-a-half house, the second story rooms may or may not be full height, but in any event the rooms never should occupy the same area as the first floor. The ceiling height of the half-story rooms all depends upon the shape of the roof. If the house is longer than it is wide, and rafters span the full length from front to back, then of course, the greatest amount of usable floor space is obtained. That style of roofing makes

the attic or second story as high as possible in the center. The lines of a story-and-a-half often allows the architect to develop a more attractive house at less expense of building than he could in an ordinary two-story house.

Full advantage is taken of the story-and-a-half idea in the house which this article describes. It will be noticed that the main roof span covers the entire house—including the porch—from front to back. This shape is but little more expensive than roofing a one-story bungalow of equal ground floor area. One doesn't get all those attic rooms for nothing, however, for there is to be consid-



The attractive lines of the story-and-a-half house.

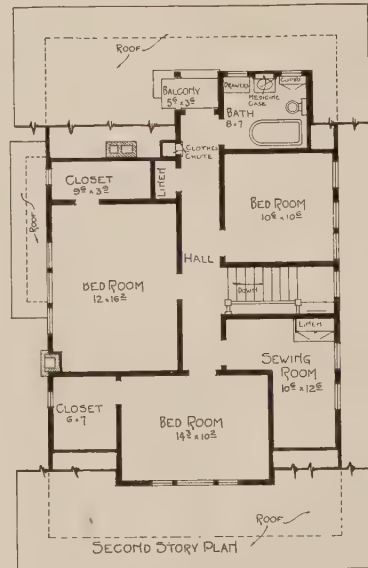
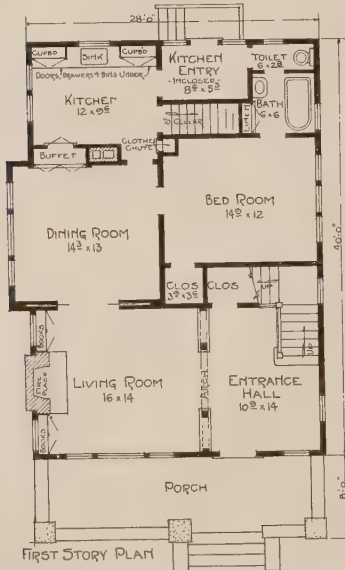
E. W. Stillwell Archt.

ered the cost of the stair hall, stairway, extra expense of handling materials on a second story level, etc.

While the floor plans of this house do not differ in a general way from hundreds of others, in details of arrangement and convenience it has been carefully worked out. On the first floor it has a permanently enclosed kitchen porch that is solidly walled up to high openings, de-

tion will stop the spread of contagion. An arrangement like this is expected to more than repay its cost in a saving of doctor's bills and possibly life itself.

The center bedrooms of the second story are full 8 feet high. In the front and rear, the slope of the rafters cuts the closet ceilings lower. Gables give the necessary height for the front bedroom, bath and balcony. There is a nice sew-



signed to be fitted with interchangeable sashes and screens, which makes the entry a comfortable work room at all seasons.

It has a bath room and toilet accessible from the kitchen and from bedroom. Few are willing to go to the unusual expense of two sets of sanitary equipment. This extra first story plumbing is not merely a convenience, but is arranged so that in case of severe sickness, a patient may be fully isolated. Under modern school conditions, children are exposed to contagious diseases and every family at some time has a serious illness in the house. All physicians agree that proper sanita-

ing room in a space that many builders would leave as a closet. This room is full height in its largest part, but the ceiling slopes in the "L" or alcove part. This sewing room is large enough for a small child's room, but if used in this way a door should be cut into the front bedroom.

In the rear, a large clothes chute connects with the first floor and basement laundry. Another uncommon convenience is the roofed-over balcony for airing clothes. Also, this bath room is particularly well equipped with the things everybody needs—linen drawers, soap cupboard, medicine case, etc.

The basement is entirely excavated in the rear, back of the living room, concreted and divided into fuel and furnace rooms, fruit room and laundry.

The exposed masonry of the fireplace and porch is a beautiful brown tinted artificial stone. Exterior walls are of shingles oiled with a little color and left to weather.

The architect estimates that the entire cost of building, under average favorable conditions, should be about \$3,500. This will naturally vary according to prices of labor and materials prevailing in each locality and the owner's selections as to grades, qualities, etc. The cost of such

a building is less than the cost of a full two-story house of equal total first and second floor area. Both the plan and its manifestation in the exterior design require mature consideration if the home owner would have better than mediocre results. Therein lies the value of the experienced architect's service. To have the general plans supplemented and explained by copious details makes everything definite. It reduces rather than adds to the responsible contractor's bids and assures mutually satisfactory relations between the man who invests his money and the man whose greatest building business asset is good will.

Influence of Environment



This bungalow has called forth much admiration. *Bungalowcraft Co., Archts.*

CHURCHES and schools do their part in influencing the young folks who are growing up, but the real influence that makes or mars the young life is the home. First, of course, is the child molded by the parental teaching, influence and example, but he is largely influenced by his environment in the house itself, its furnishings and its surroundings. To him as well as to his parents there is a comfortable feeling of pride when the towns people bring their friends and point out his home as the "prettiest house in town."

The house shown on this page is one which, without being expensive, has called forth much admiration, both for the design of the exterior and for the thoughtful planning of the interior.

The exterior is shingled which, with brick in the porch, chimney and foundation work, gives it an air of substantial solidity. The lines of the building are very good and the whole effect is very attractive. The long porch at the side of the house is an effective as well as a very convenient feature.

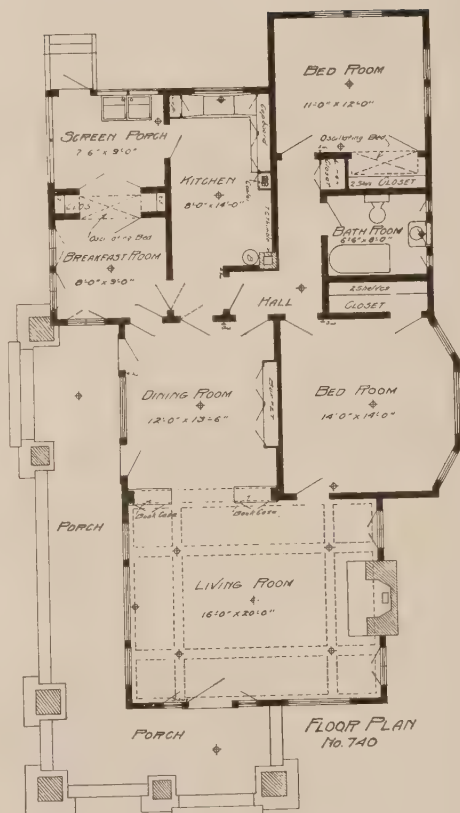
This house has been built as shown

here and has given great satisfaction. It has also been built from the same plan completely reversed to take the best advantage of a different location. If a house should be built on the other side of the street from that first intended the plan should generally be reversed to get the best exposure for sunshine and breeze.

The living room is a good room and well proportioned and both the dining room and bedroom opens from it, with the kitchen and service part of the house on one side and the sleeping suite on the other side.

The breakfast room and porch show rather a unique arrangement. A bed is built in between the two with doors so arranged that the bed may be opened into either. The breakfast room may be used as the extra room in this way, with the advantages of a sleeping porch. A disappearing bed is shown in the rear bedroom, but larger closet space is available if these beds are omitted.

The kitchen is fully equipped and is convenient either to the dining or breakfast room. The laundry tubs are placed on the screened porch.



Homes of Individuality

Selected by W. J. Keith, Architect

A Real Home

THERE is a pleasing contrast in this design, between the white stucco, brown trim, and reddish brown brick work splashed here and there with a purple touch. The brick foundation is most effective, and the terraced entrance porch of brick, leading to the vestibule, gives a very charming impression. The low pitched roof with its attractive dormer, together with the sun parlor and artistically grouped windows, lends to

the whole design a cheery, homelike, aspect.

Brick steps and terrace lead up to the entrance vestibule, which is really a small sunporch, as it is all enclosed in glass. This gives entrance into the living room, which opens to view in a most attractive way the main living rooms of the house, with the glass doors to the sunporch and the colonnade opposite.

In the living room we have an unusual and beautiful apartment. The end near

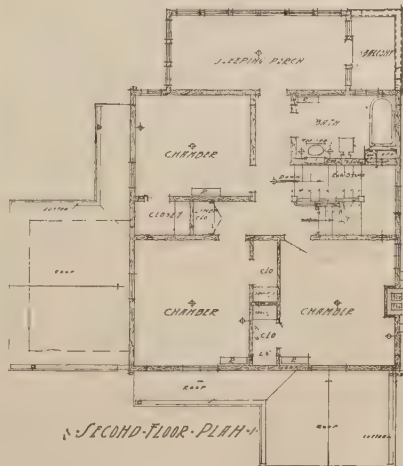
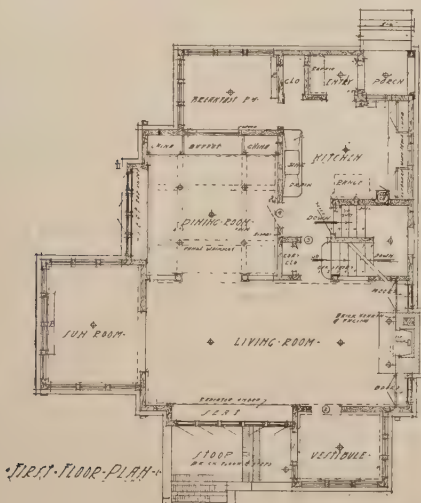


A pleasing contrast of stucco and timber.

the entrance is filled by the well designed fireplace, flanked on either side by built-in bookcases over which are high casement windows, while at the other end of the room a pair of French doors open to the sun parlor. Extending quite across one side of the living room is a sort of colonnade effect, through one end of

which leads to the dining room, the other screening the stairs. On the opposite side is a long bay of five casement windows containing an attractive seat beneath which the radiator is concealed. Beside this is the entrance door leading to the vestibule.

The dining room ceiling is beamed, the



posts of the colonnade carrying the beams in one direction which are crossed by beams similarly spaced. A beautiful built-in sideboard and china cupboards fill one side of the room. A bay of windows project on the other side, in which is a seat under which a radiator is placed. At best, radiators are not ornamental, and they are not less effective for being out of sight.

A double swinging door connects with the kitchen, which is quite completely equipped and has good cupboard space. The kitchen communicates directly with

second story is finished in white enamel.

There is a full basement under the entire house, containing the hot water heating plant, laundry, etc.

All on One Floor

To many people the house without stairs has a very strong attraction, especially when it is so planned that the sleeping apartments are set apart from the rest of the house.

With its great cement pillars this bungalow offers a very attractive approach. Its width would allow it to be readily



An attractive approach.

the living room and the front door for service. The landing of the stairs, going down, gives a grade entrance to the basement. Beyond the kitchen is an entry where the refrigerator is placed and a porch. Beside the entry is a closet and opening beyond that a small breakfast room, which is really the extra room of the house, being adaptable to many other uses. It may be used as a sleeping room or as children's room or as a servants' room.

On the second floor are three chambers, all having good closets, a large sleeping porch, from which an open balcony is reached, and a bath room of more than the usual size. The stairway to the attic is over the main stairs. The entire

built on a fifty foot lot, and still leave sufficient garden space on either side.

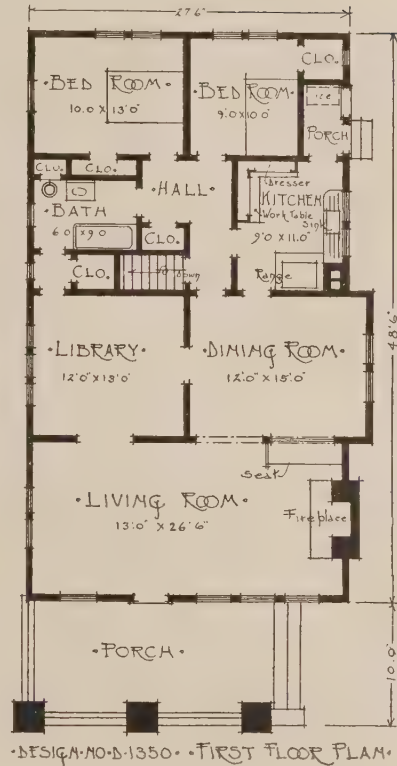
The roof, in keeping with this type of house, is of slight pitch and is covered with a composition roofing. Shingles are used for the side walls, and the porch posts are built up, and cemented on metal lath.

The floor plan shows a convenient layout of rooms with every modern convenience. Extending across the front is a generous living room, thirteen feet wide and twenty-six feet long. A great open fireplace is built in at the end and a wide seat is arranged against the post and panel screen, partly screening the dining room. A pair of glass doors open to the adjoining library. Three casement win-

dows light this room and a glass door allows for an effective vista through the dining room. Ample wall space is provided, which would permit this room to be used as a bedroom if desired. A passage on which opens a good closet connects the library with the bath room.

The dining room is large enough to accommodate a good sized dinner party. It connects directly with the "pantry kitchen," which has built-in cupboards and work table, and which is very compact in its arrangement. The icebox is placed in a recessed porch beyond. This porch may very readily be glassed in and be used as working space.

The basement stairs open beside the bedroom hall, which connects both bedrooms with the bath. The bedrooms are of a good size and have each a roomy closet; there is also a large closet in the hall. The plan of the bath room provides for a tiled floor and sanitary base, with side walls plastered with Keens' cement to a height of five feet and lined off to form tile. The low down water closet tank is built in the walls and above it is arranged a useful closet.

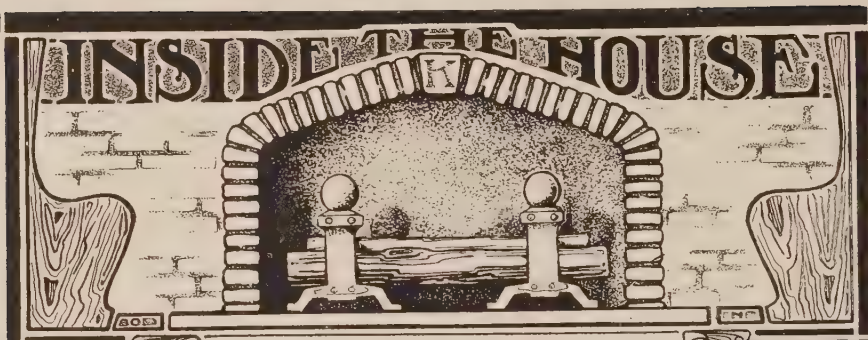


A "Lift" in the Home

THE popularity of the bungalow is in a certain degree due to the fact that it brings the home all on one floor. This same condition doubtless accounts for the desire of housewives to live in a flat or even in a tiny apartment. The trip up and down stairs every time the telephone or door bell rings or any one of a thousand other things may happen if figured in horse power for a day's time, would be a factor to be counted on in a man's business. But figured in woman power it is a negligible factor in the business of living. A dumb

waiter is installed in larger establishments, and in occasional instances an invalid elevator is placed in a home. But why should not a housewife have an elevator for her own use, one that could be operated by hand, much as a dumb waiter is operated.

The first cost is perhaps the reason that this subject has not been considered more seriously by builders and especially by home builders of moderate means. But what investment could yield a greater return in comfort and health.



DECORATION *and* FURNISHING

Conducted by Chas. Burdick, Decorator.

The Tendency Toward Simplicity

THE decorating and furnishing of the home should be given serious thought and study; a knowledge of the combining of colors and harmony of design being a requisite. It is not necessary to spend a large amount of money to obtain pleasing and harmonious results. The application of

wall paper, paint and water color, is simple and so charmingly adaptable to our modern homes, and as the present tendency is toward simplicity, the average homebuilder with the exercise of a little taste and much thought, may imbue the most modest cottage with an atmosphere of harmony, beauty and comfort.



Interest centers around the fireplace with its fine soft color.

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The greatest transgression of the law of color and form is over elaboration and the use of antagonistic colors. Unfortunately, some of us having a craving for novelty, strive for a "rich and elegant" effect; something different from our friends and neighbors and the result is generally inartistic and incongruous.

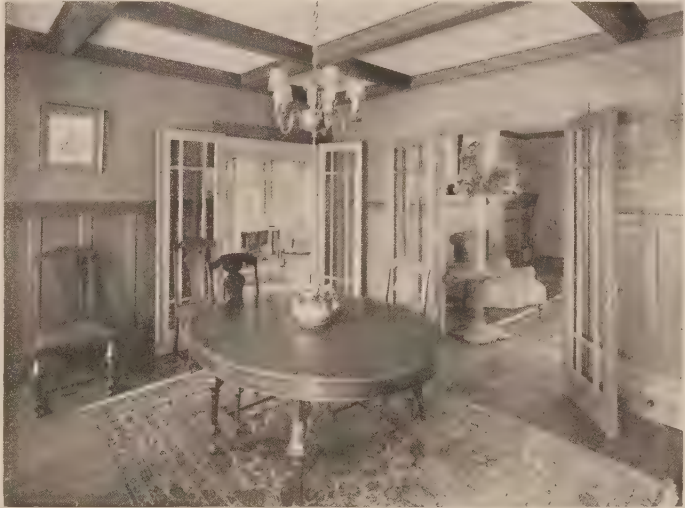
The planning of a color scheme is a difficult problem to the average home-builder. In "laying out" colors, the entire floor plan must be studied as a whole and the relation of the rooms to one another; also, the finish of the wood trim and the exposure of the different rooms.

In selecting colors, the amount and quality of light entering the windows, must be taken into consideration. Rooms with a cold northern exposure having very little direct sunlight, should be treated in warm glowing colors, such as luminous yellows and buffs, golden and russet browns, or warm rose tones. Cool grays, blues and greens are admirable for rooms with a southern exposure. The temperature of a bleak north room done in a cool receding color, will seem ten degrees colder.

The Wall as a Background

Walls, with a few exceptions, should be considered simply as a background for a few good pictures and must be rather plain in treatment and not smothered with ornament. It is timely here to say

that three-fourths of the wall hangings now on the market are not worthy of consideration. Small interwoven designs in two-toned effects, grass-cloth papers, papers with a textile weave, or those perfectly plain, but with a good depth of color, will generally give a room a subtle impression of repose and cheerfulness.



The furniture is designed in the period of "William and Mary."

I have seen many beautifully proportioned rooms literally ruined by the use of wall paper partially or entirely covered with design. Take for example, the large patterned and exquisitely colored papers by such artists as Walter Crane, William Morris and Shand Kydd; beautiful wall hangings that may be justly considered works of art, but nevertheless papers that would be tiresome in the daily life of the usual home.

Color and design are not the only canons to be observed. In striving for "atmosphere" in the average living room, everything should be subordinated and



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no one article or group of furnishings should dominate. The wall hangings, draperies, floor coverings and furniture should be chosen with the idea of simplicity, suitability and proportion, producing an ensemble at once soothing and restful to the eye.

An ideal living room is shown in the accompanying photograph. Large and restful, entirely without formality, harmonious in treatment and thoroughly livable. This pleasant apartment is 20 by 30 feet in size, with the walls hung in a beautiful grass-cloth paper in soft gray and tan. The ceiling is treated in ivory with well proportioned oak beams traversing it. The wood trim is stained in fumed oak and waxed and has a beautiful gray undertone.

Light

A flood of soft natural light, tempered by sheer lace curtains, enters through six large casement windows in the west wall and through French doors in the east wall opening into the dining room.

For artificial light, a luminous alabaster bowl, equipped with small frosted globes and powerful tungsten lamps backed with reflectors, furnishes an agreeable and mellow light that is peculiarly soothing and restful to the eye. There are also two portable lamps equipped with long cords which may be attached to light plugs in the baseboard at convenient points. The table lamp with its carved stand is shaded with rose-colored silk. The shade has panels of Japanese silhouette lace backed with rose silk. A floor lamp is shaded with silk in a mulberry tone and lined with thin transparent silk in a champagne tint.

A well designed desk with chair to match, in Sugi treatment by the late John

Bradstreet, is conveniently placed between the windows and the mantel.

A small table also in Sugi finish is shown in the photo supporting a tall silver vase. The entire top of this table is covered with incised ornament in the pure Japanese style of treatment with the background deeply depressed.

A large, roomy overstuffed davenport, with soft loose cushions, covered with wool tapestry in a small Colonial pattern, is placed against the east wall.

The six casement windows grouped in one frame are hung with very sheer soft lace in a stripe effect which hangs straight to the sill, without interfering with the view. The overdraperies are made of a fine fifty-inch silk fabric in alternating two-inch stripes of mulberry and fawn, each stripe being edged with a narrow line of black. This material has a slightly watered or moire effect and is made up with a tan sateen lining and caught back with bands of the same material. The laces are hung with rings, to slide on the rods which may be drawn to one side by transverse cords thereby allowing the windows to swing into the room. The overdraperies are hung in the same manner and operated with silk transverse cords allowing the silk curtains to be drawn across the windows at night and doing away with the opaque "shade" which is always an objectionable feature when applied to casement windows.

One of the finest products of the Persian looms that I have ever had the good fortune to see is the large Kermanshah rug which graces the floor of this room. The greatest attraction of this rug is its wonderful coloring, being fairly aglow with life and luster. The field of the medallion is in soft deep ivory outlined in



black, while the ground colors of the corners is rich deep rose relieved with small figures in tan, blue and black. Seven particularly well designed bands form the border of this masterpiece produced by the clumsy hand looms of the Far East.

Handicraft Tile

The feature of this room is its lovely mantel built of tiles made at the Handicraft Guild. Being handmade, no two tiles are exactly alike; even the glaze being applied by hand instead of being sprayed on as is customary in commercial work. The dull mat glaze of the tiles with their variations of shade and texture harmonizes beautifully with the walls and wood finish and frees the face of the mantel from the glittering reflections of the ordinary commercial tiles. In the making of these tiles straight edges and square corners are not emphasized and they are laid with a wide mortar joint. This shows a characteristic and pleasing variety of line as well as of color, giving a charming effect. Inset tiles in low flat relief in soft contrasting shades of orange and green are introduced, and the hearth is raised slightly above the level of the floor. The heavy mantel shelf extending the full width of the room and embracing the bookcases on either side shows a broad and generous treatment.

A view of the dining room and sun room adjoining is also shown. The dining room is finished in fumed oak, with the walls hung in a grass-cloth paper in dull old blue with a glint of gold showing here and there. The sideboard, table and chairs in the "William and Mary" treatment are finished to match the woodwork and the seats of the chairs are covered with Spanish leather in a dull reddish brown.

The sun room adjoining, with casement windows on three sides overlooking the lawn and garden, is charmingly executed in gray. The simple oak wood trim and furniture is done in Kaiser gray stain and waxed with the upholstering in gray, Spanish leather. The rough brick fireplace opposite the window carries this same gray tone and the walls are hung in a heavy embossed paper in linen texture in the same shade. The floor is gray Mosaic with touches of contrasting colors in the design.

This room has no draperies or laces except for a gorgeously colored English chintz in reds and wisteria attached to rollers in the form of shades. This charming room is very refreshing and with its blazing log fire offers an ideal loafing place to while away a winter afternoon.

Buying by Proxy

Keith's Guide on Home Decoration and Furnishing Brings Some Notes from the Shops

Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration," a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given *free of charge*. Enclose stamp for reply.

THE feeling for black and white which has applied to wearing apparel and to decorations has become very pronounced in interior furnishings and accessories. Whether this style,

Austrian, Hungarian, or Venetian (they are all guilty), will prove lasting or not is a debatable question. When this "modern" style with its mournful black bands and startling splashes of color was

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introduced a short time ago, it was looked upon with amused interest as something fantastically pleasing, but we have noticed of late that some of our leading decorators have been quietly experimenting with this "domino" scheme of color and design with amazing but charming results.

Possibly on account of the lack of imported dye stuff, or possibly in anticipation of black and white becoming a popular fashion—it is very noticeable that the traveling representatives of the large importers and manufacturers are showing an immense variety of wall hangings and drapery fabrics in this ultra-modern decoration. Some of the eastern theaters and a few

of the large New York millinery shops and fashionable cafes, always on the lookout for new and unusual decorative effects, have adopted this striking color scheme which for sheer smartness cannot be equalled.

Being somewhat timid as to the adaptability of this style of treatment in the average home, the home builder is a little cautious in the matter of applying this "latest decorative scheme" in her own home. For

the present this treatment is being confined mostly to rooms having white or ivory wood trim or very dark mahogany.

Wall papers suitable for a black and white treatment are not necessarily shown in a large variety of patterns. Papers in

narrow black vertical lines or a conventionalized floral stripe in black, rose and green with narrow floral borders in the same colors with black predominating are mostly in demand. These papers are printed on an ivory or white ground and well covered with a small set figure in a grayish white.

The furniture must necessarily be either black or white or a combination of both. Many beautiful pieces

of furniture suitable for a room of this character are being displayed in the shop windows, in a combination of ivory and mahogany and upholstered in black and white. Wicker furniture in old ivory with the raised ornamental reeds done in dull black enamel is quite the proper thing. For the more formal room in which the furniture is in some particular period, the background of the different pieces is in solid black while the relief is worked out



Wicker table, No. 628, \$9.00; old ivory enamel; 27 in. high; top 18x24. Wicker lamp, No. 631, \$9.55; 22 in. high; shade 15 in. diameter; black and rose chintz lining. Crotonne on table, No. 64101; 31 in. wide; 90c yd.; black stripes with decoration in rose, green and blue. Wing chair, No. 44552, \$30; cane back and seat; ivory enamel with mahogany arms; loose pads in black and white linen. Fabric on chair, No. 2850, \$2.25 yd.; 31 in. wide; heavy pure linen, black and grey on white ground. Crotonne on extreme left, No. 28103, 60c yd.; 36 in. wide. Between papers, No. 21577, 60c yd.; 38 in. wide; perfect imitation of the original imported linen; a printed cotton in a coarse linen weave on a black ground with decoration in rose, orange and lavender. Wall paper on the left, No. 317, 50c single roll; black dots on flat white ground; floral stripe in blue, lavender, rose and green; border 10c yd.; black, rose and green on tan ground. Wall paper on right, No. 318, 50c single roll; background in white and ivory with white silk stripe; floral stripes in solid black; border 10c yd., in black, grey, pink and green. Rug, No. 17202, 8 ft. 3 in. by 10 ft. 6 in., \$47; field in mottled grey and black, conventionalized floral border in black.

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in white or ivory with possibly a suggestion of color taken from the decorations of the room.

For the covering of the floors there is a wide range of materials to select from. The most popular material is the rug with a mottled gray and black center with the heavy black border showing sharp lines of yellow or orange.

As is naturally expected the feature of the room will be the gorgeously colored chintz or cretonne hangings, covered with curiously shaped parrots and birds of paradise perched on grotesque vines amid a tangle of glowing color. The variety of designs and color combinations is unlimited, both in the expensive hand block linens and the lower priced but artistic machine printed cottons.

The great demand for unusual effects has induced the foreign manufacturers to resurrect many of the long forgotten hand made wood block patterns and they are now printing them in all their original purity, on the finest quality of soft undyed linens, silks and even velvets.

To go to the other extreme domestic manufacturers are copying many of the imported fabrics on imitation linens so cleverly that it is almost impossible to tell the difference except upon close inspection and in some cases an actual comparison of the two fabrics must be made. Some of the shops are displaying many of these fabrics in thirty-six inch widths as low as fifty and seventy-five cents per yard, and in the imported machine prints there is to be found an immense selection of thirty-one inch fabrics as low as fifty cents per yard in color, pattern and texture that would please the most critical.

INSIDE THE HOUSE



THE real charm that changes four walls and a ceiling to a room that satisfies the artistic instincts of a home builder is created by the treatment of the woodwork.

Here are two of the leading Architectural Finishes. They are the perfected results of nearly 60 years in varnish making, and will satisfy the most critical:

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LUXEBERRY WHITE ENAMEL Whitest White Stays White

This is also adapted for bathrooms, window sills and casings, and all interior work where great durability is desired. It makes a smooth satiny finish, is mar proof, and easily kept in perfect order.

Write our Architectural Department for interesting literature on wood finishing for the home builder.



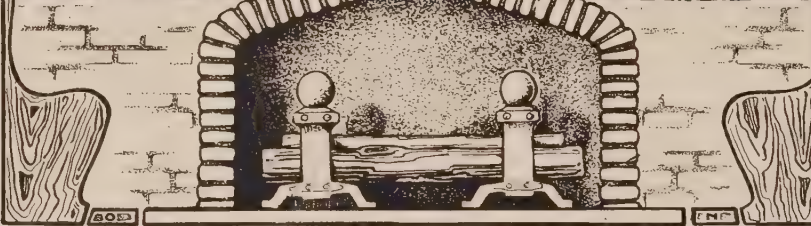
BERRY BROTHERS World's Largest Varnish Makers

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ANSWERS TO QUESTIONS ON INTERIOR DECORATION.

Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

Window Treatment.

C. C. M. I am sending designs of my windows, there are so many of them to decorate.

Shall I use net curtains in the windows above bookcases? Shall I use a valance in those windows? Shall I put the over-drapery next to the windows or on the casing of a projecting window in dining room whose ledge is eighteen inches wide? We are staining the woodwork a very light fumed oak and dull finish. I wish to have old rose and mulberry tones predominate.

I thank you for your efforts and wish to express sincere appreciation for the good work of "Keith's" and the "decorating department."

Ans. Yes, you seem to have many windows but it is not necessary to use a valance at all in living and dining rooms and it would save money and trouble to dispense with it. The net curtains are hung inside the casings, next the glass. The over-draperies are hung from a separate rod which is placed on the top casing and extends over on the side casings. In the little window with the deep sill, we would use only the mulberry Sunfast and set these inside the frame, near the glass. The windows over the bookcases need no net, only the Sunfast.

Cretonne can be used on a couple of wicker chairs stained light brown and the velvet on other furniture.

The Colonial Spirit.

E. A. G. I am interested in the Dutch Colonial house described in your August number. We expect to build our own

home later and hope to make it very like this one. Also would you give me some idea of what we should buy to furnish such a home. I want to buy a few things at a time and not have my house like every other house in town. I'll give you an idea of what we have on hand, as I probably could not furnish whole house new.

Ans. You have taken a fancy to a very attractive Colonial house and think you want one just like it. But you have not considered that the charm of this interior is the harmony between the furnishings and the style of the house. Both have the Colonial feeling. This would not be the case with your furnishings, except perhaps in the dining room.

If you wish to build this type of house we suggest that you dispose of the two heavy fumed oak chairs in den and furnish this or a similar room, a breakfast room perhaps, with your present living room pieces of brown wicker. Then put the mahogany bookcases in living room and you could also use there the small rush seated chairs you now have in den, getting some additional mahogany pieces for the living room and hall. Mahogany and antique cane would be good for one or two chairs, especially a Fireside chair. The fumed oak tea table can remain in living room; it will not conflict. You can follow the general ideas as described in the Dutch Colonial house.

An Interesting Floor Plan.

A. J. We are sending you blue-print of house we are building for our home. We want to ask your advice about color

Coal Bill \$40 Less

More Heat - Few Ashes - Healthful Air

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We use soft coal costing \$4.50 per ton. Hard coal here is \$8.50. I estimate we saved \$40 on our coal last winter. Furnace is easy to manage. No waiting until 10 A. M. to get heat up as with our old top-feed. I remove ashes once or twice a week, and only a small quantity. Before we could not grow flowers on account of gas from other furnace. Now we can. To my mind it is the best heating apparatus to be had. I am proud to be the owner of one.

(Signed) E. E. LORD, Peterboro, Canada



A Big House in a Cold Part of Canada



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For instance, read the letter shown to the left. It is from a cold part of Canada. It tells of *more* and *better* heat for *less* money the UNDERFEED way. And it is only one of thousands of just such others which we will send you for the asking.

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Send the coupon today—NOW. Remember, the saving of one-half to two-thirds coal cost is actually GUARANTEED the UNDERFEED way. The coupon also brings a very interesting book, "From Overfed to UNDERFEED," free, which pictures and describes it all.

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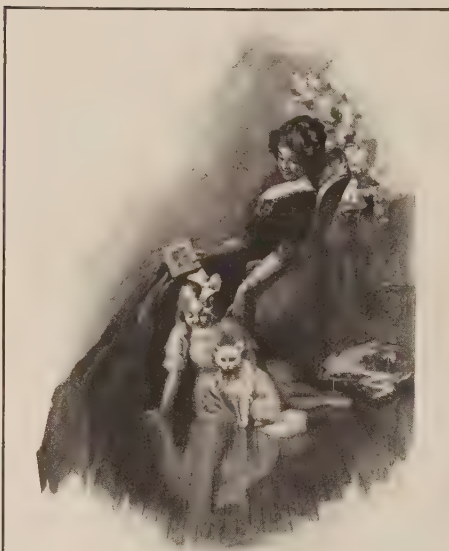
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Minneapolis, Minn.

Decorative Service

WHERE detailed plans for HOUSE DECORATION are desired with samples and prices of wall paper, fabrics, window drapes, etc., the moderate fee of \$1.00 per room or \$5.00 for the entire house will be charged to defray the expense of our decorator's time in working up the plan, securing and mailing samples. Address

Keith's Decorative Service, McKnight Bldg., Minneapolis, Minn.



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- ❑ In the majority of the finest residences where floors of **permanent** beauty are desired, **Oak** is specified and used. In moderate priced residences where the cost question is considered more closely, **Oak** is again the chosen material for floors.
- ❑ An **Oak Floor** needs no disguise. Its natural grain imparts an air of quiet refinement and is even more dignified than carpets or other floor coverings.
- ❑ **Oak Flooring** $\frac{3}{4}$ " thickness by $1\frac{1}{2}$ " or 2" faces can be laid over old floors in old homes or over cheap sub-floors in new homes at a very low cost. It is cheaper than carpets or pine flooring.
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Write for booklet

The Oak Flooring Bureau

1348 Conway Bldg., Chicago



scheme for living room, which is living room and dining room in one. (The bedrooms are to be white enamel with mahogany finished doors.)

Living room is to have oak floor and slash grain fir doors, trim and beams. The only colors fixed are the cream brick of the fireplace and buff tile for hearth. The house faces north. Our furniture is golden oak. What color would you suggest for walls, and for seats and table in breakfast room?

Ans. Your blue-print shows an unusual and interesting floor plan. The little breakfast alcove off the kitchen is very pretty and convenient if you do not find it too warm in summer. Perhaps the porch will take care of that. As this alcove has only indirect light, we would get an effect of sunlight by tinting the walls Colonial yellow, which will be good in kitchen also and pretty with the white woodwork. We would finish the kitchen wall four feet up from floor with hard cement, marked off in a large tile pattern and painted a light cigar brown. The seats and the table we would stain a very pale brown, using the dead-lac finish. Have yellow and pink cotton voile or muslin curtains at the windows and a pink shade over the light.

The living room shows many windows, but they are north and west, so you must keep it in warm tones. A light brown stain will probably be best for the woodwork with your golden oak furniture. Were it not for this furniture we would suggest silver gray for the woodwork, but it would not accord though it is so pretty. The brown tone will also look best with the cream brick. We think the walls must be a soft pale ecru with cream ceiling. The rugs and furnishings we would have principally deep rose tones or mulberry.

The grey wall will be very pretty with light green and rose cretonne curtains, and a wicker chair painted apple green and upholstered in the cretonne. Scarfs of Chinese toweling in the blue and white would be pretty on the table in the little breakfast room alcove and blue and white dishes.



*Woodwork—Mahogany Glaze over birch, varnished and rubbed.
Floors—White oak natural, varnished.
Walls—Mellotone ivory tint, Tiffany finish.
Ceiling—Mellotone ivory tint. (Hall seen through French door finished same way).
Furniture—Old brown mahogany.
Draperies—Browns and red-browns predominating, with olive as a neutraliser.
Rugs—Deep brown self-tinted with border pattern in lighter tone of same color.
Hardware—Center light, brushed brass.
Shade on center light—Brown silk lined with cream silk.*

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Ten interior views—eight exterior views—with specific suggestions for each house and room—together with a booklet full of ideas for getting best results in painting and decorating houses, woodwork, walls, etc., will be gladly sent on request.

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200 VIEWS



IN PLANNING the new home or in the remodeling or decorating of the old one, the interior treatment, both as to architectural detail and decoration and furnishing, is very important. Correct expression of decorative schemes is a difficult matter for the average person to handle. In view of this, we have published in "INTERIORS BEAUTIFUL" two hundred selected views of the interiors of successfully planned and decorated homes and give, in the captions under the illustrations, the scheme of decoration used.

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INSIDE THE HOUSE

Decorating a New House.

C. S. B. I am very much pleased with your suggestions, and hope to be able to follow them, but as actual building operations are just starting will not occupy house until December, and we are seriously considering allowing house to season before decorating. What would you advise?

Ans. We have had a wide experience in decorating immediately after building and find no trouble if the house is properly built. If it is poorly built, cracks, etc., will keep on coming no matter how long you wait.

Center Lighting.

J. W. Do you think Bog Oak for hall, living room and dining room, all opening together, a suitable color for a bungalow; rather, are the wood dyes being used now for interior work in preference to the old favorites of white, mahogany and oak?

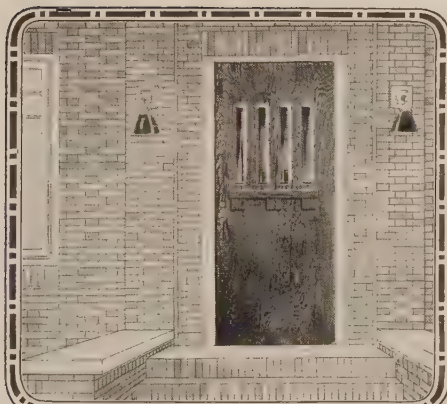
Is it a fact that center lighting is out of date and that bracket lights are more preferable?

Will you suggest a bungalow color for exterior work, where there is a street of yellows, grays and greens?

Ans. In reply to your questions: The choice of stains for your interior woodwork depends altogether on the character of the furnishings. With mahogany furniture we would never associate a Bog Oak stain. It is good for a den or a sun-parlor, but we would not choose it for either living or dining room. For the dining room, old ivory woodwork is always appropriate and attractive and combines with either fumed oak or mahogany.

As to center lighting, it is not out of date; the side lighting is used wherever practicable. In a larger living room it is rather necessary to have a center light and this is supplemented by two or more brackets. There is always a center light over the dining table. In other rooms side lighting is preferred.

We think a cigar brown for your bungalow, copper red roof and cream trim, would be a pleasant change from the rest of the street.



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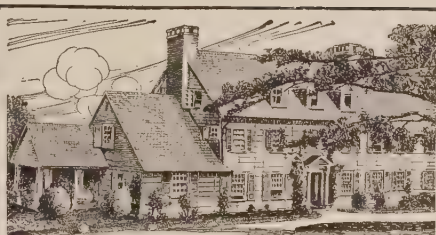
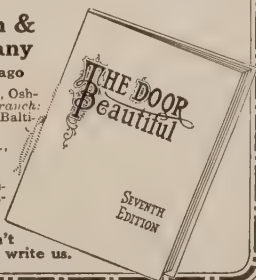
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Little Rock, Arkansas



A Sectional Clothes Drying Frame

HOW and where shall we dry our clothes after they are washed? If it is possible we want them to dry in the sunshine and in the open air, but in bad weather there must be an easy way of hanging them in the basement or attic. When the sun comes out unexpectedly, moving them outside is quite out of the question. When a sudden storm comes up it is hard to get them in quickly enough to avoid the rain.

Here is a sectional drying frame which may solve the problem for some housewives. It consists of a central standard which is dropped into an anchor block placed conveniently on the lawn. When the standard is removed a cover fits over the socket and nothing remains in sight. Four sections drop into brackets at the top of the standard. They also fit wall brackets which may

be fixed to the laundry or basement walls.

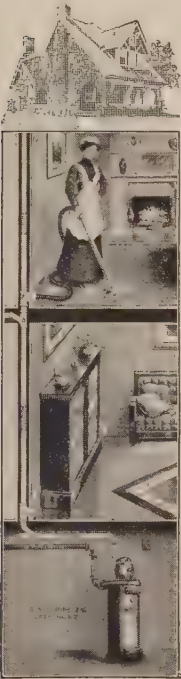
The clothes may be carefully and comfortably hung up while the section is on the wall of the laundry and then the whole section full of clothes taken out of doors and placed on the standard. Think of the comfort on a cold day of

hanging the clothes on the line in the laundry beside the tubs, saving the unpleasant task of standing out in the wind and cold to place the washing on the line. When the four sections are filled and in place on the standard the rigid bars are bolted together, looking not unlike the usual clothes reel. The top section of the standard containing the brackets is pivoted so that the reel responds to the motion of the wind and saves pressure on the clothes.

If a sudden shower comes up each section, filled with clothes, may be brought in and set



The standard is dropped into an anchor block.



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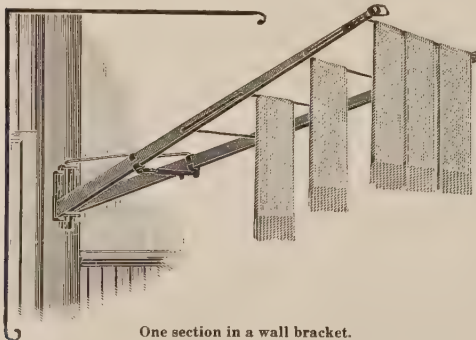
INSIDE THE HOUSE

in the wall brackets in the house. After the shower is passed they may be put out again without much effort.

Each section is composed of two metal arms which fold together, or spread in use. When put in place they are locked at the desired spread. The clothes line is threaded back and forth between these two arms. The line, even if filled with clothes, dropping slack when the arms are folded together to carry.

For hanging clothes indoors these sections set in wall brackets give more hanging space in small compass than can usually be arranged in other ways. The four sections out of doors may be drying while other sections are being filled indoors. Additional brackets may be set on the outside of the house if desired. The parts come separately and can be arranged to fit the individual need.

It is suggested that these sections are very convenient for tiny apartments where a bracket may be set on the outside casing of the window so that it can be reached and the section



One section in a wall bracket.

put in place from the inside of the window. One would be sorry to see our apartment houses so decorated, but there might be conditions where they would be admissible.

The standards may easily be set on the roof of apartment houses or even

on screened porches and used as they would be on the lawn. The anchor block may be set in such a way that the cover is flush with the floor when the socket



A section filled with clothes may be set into the standard.

is covered, so that it will not spoil the porch floor. A rug can be thrown over it so that it will not even arouse a question from the visitor.

An Adjustable Caster.

According to late reports a patent has been issued for a device which some millions of more or less exasperated householders have craved in vain. It is an adjustable caster, so made that it can be lengthened or shortened when the table or other piece of furniture will not stand firmly on an uneven floor. This will make it unnecessary to hunt for a chip or wedge to keep the table from tilting.

In the interest of the public such a patent should be immediately taken up by the manufacturers and put on the market, but we have not been able to find that this has been done, though the patent was reported some months ago. We should be glad to know if any one has found this device on the market.

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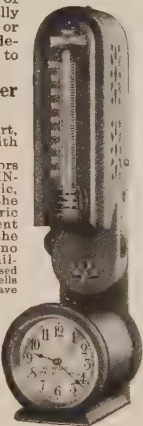


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The Perfect Cup of Coffee

GIVEN a percolator of the modern sort, good coffee is an easy matter, but how many people can make really good coffee without any special appliances?

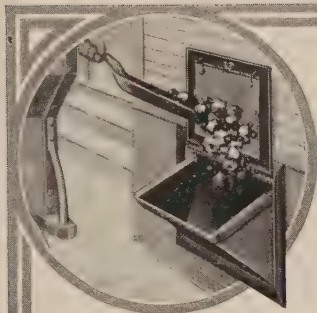
Two things are essential, good coffee and freshly boiled water. It must be rec-

ognized that drip coffee and boiled coffee are different things, each having its own flavor, some people preferring one, some the other. Boiled coffee is probably more economical than dripped coffee, as the boiling extracts the utmost possible flavor.

If you prefer boiled coffee, have the



Serving coffee.



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It can be placed close to the kitchen door with only the top and cover exposed, where it is convenient but never unsightly. It is water tight—snow and frost proof—emits no foul odors and keeps contents free from mice, dogs, cats. It is always closed, and can easily lift out for emptying. The dumping door opens with the foot lever. It closes itself.

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LIGHTING GAUMER FIXTURES

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berries finely ground, not pulverized. There is a good deal of nonsense talked about the importance of grinding coffee for each meal. The process adds to the difficulty of having breakfast on time and is seldom more than a rough breaking of the kernels, involving the use of a great deal more coffee than when it is granulated.

To insure the water being freshly boiled, heat it in the coffee pot, measuring the exact quantity required. When it is boiling rapidly, add the finely ground coffee in the proportion of a very heaping tablespoonful to each person. Tea should have the water poured over it, coffee should be stirred into the water. I do not know the reason but the fact remains. If you are making the coffee over gas, turn the burner down to its lowest point before you add the coffee. On a range, draw the pot to one side where it will boil very slowly, and let it do so for about five minutes. When it has boiled sufficiently add a little cold water to clear it and strain it off into the heated pot which you use on the table, taking great care to hold the pot steadily.

So much for boiled coffee. For dripped coffee the berries must be pulverized, if you are to get the full strength out of them. There are a good many earthenware French coffee pots to be had, costing usually about a dollar and very good looking indeed. The holes in the upper part are rather large and it is a good plan to keep a supply of circles of cheese-cloth, and to lay one in the bottom of the percolator before you put in the coffee. Filtering paper answers the same purpose, but it takes rather longer for the water to pass through.

Boil the exact quantity of water required and allow an extra cup which will be absorbed by the grounds. Set the coffee pot on the side of the range, or on a gas burner turned very low, with an asbestos plate to protect it, and pour the water onto the coffee very slowly, letting it drip through into the lower part.

When it has all dripped through, take off the top and pour part of the dripped liquid into a small jug. Put on the top and drip the contents of the jug through the percolator. It is a good plan to let the coffee boil up after the top has been removed, as it is the weak point of dripped coffee that it is apt not to be very hot.

With one of the many varieties of French coffee pots in enamel or other metal, you have less trouble in keeping the coffee clear. You can buy in the shops aluminum percolators for coffee, perforated balls like a tea egg, and with these you can use a very finely granulated coffee, simply pouring the proper quantity of boiling water into the pot, dropping in the ball and letting it steep for a few minutes.

You can even make drip coffee with no more apparatus than a fine strainer fitting the top of a jug. Lay a bit of cheese-cloth in the bottom of a strainer, then put in the coffee and pour the boiling water through it, covering it with a folded napkin while it drips. And you can easily make a single cup in the same way, covering the cup with its own saucer.

If you buy your coffee ready ground, as I have already said the best and most economical way, get it in small quantities not more than a half week's supply at once, and keep it in a glass preserve jar, with a screw top and a rubber ring, which will protect it perfectly from the air. Indeed a supply of fruit jars to hold dry groceries is almost essential to the well regulated kitchen. Supply each jar with a good sized label, with the name of its contents plainly written, and insist on paper bags and cartons being emptied the moment they come into the house.

In America we consider cream essential to coffee but Europeans drink it with hot, not boiled, milk, and it is probably If you have to go without cream you much more digestible than with cream. easily acquire the taste for hot milk.



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Is Sewer Gas Leaking Into Your Bathroom? You Don't Know

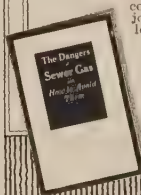
Sewer gas, for all its potential danger, is odorless.

The connection of the average closet is sealed with putty. In time putty dries out, shrinks and crumbles and the joint is not tight. In most homes this means a sewer gas leak direct from the sewer main. To avoid this, see that the closet you buy is equipped with the Donovan Safety Flange. Your plumber knows this flange and will explain it. It's a tell-tale device that exposes a leak instantly. A quarter turn or a half turn given to a conveniently located screw, tightens the joint and stops every possibility of a leak of sewer gas.

Write for a free, informing booklet, "The Dangers of Sewer Gas and How to Avoid Them."

Dept. "K".

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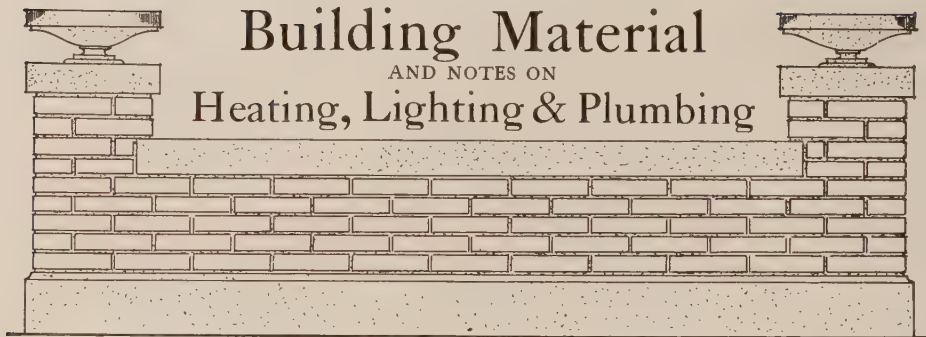
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MASONRY.

John Upton.

STONE masonry is a matter of first importance to the builder, as its conditions must be studied whatever materials are eventually used in the foundation of the building under consideration.

Here are some notes on weights and strengths of materials, and methods of measurement in common use, which are valuable for reference.

Measurements.

Stone masonry is measured by two systems. Quarryman's and mason's measurements. By the quarryman's measurements, the actual contents are measured; that is, all openings are taken out and all corners are measured single. By mason's measurements all corners and piers are doubled. No allowance is made for openings less than three by five feet, and only half the amount of openings larger than this.

Range work and cut work is measured superficially and in addition to wall measurement. An average of six bushels of sand and cement is used per perch of rubble masonry. Stone walls are measured by the perch of $24\frac{3}{4}$ cubic feet, but in practice 25 cubic feet are considered a perch of masonry. Openings less than three feet wide are counted solid, but openings over three feet are deducted, although eighteen inches are added to the running measure for each jamb built.

Arches and Dimension Stone.

Arches are counted solid from their spring, corners of buildings are measured twice. It is customary to measure all foundations and dimension stone by the cubic foot. Water tables and base courses are

measured by lineal feet. All sills and lintels by superficial feet. Walls are never considered to be less than eighteen inches thick. The height of brick or stone piers should not exceed twelve times their thickness at the base.

Excavations.

Excavations are measured by the cubic yard and irregular depth or surfaces are generally averaged in practice. To find the number of perches in an ordinary job multiply together the length, height and thickness in feet and divide by 22.

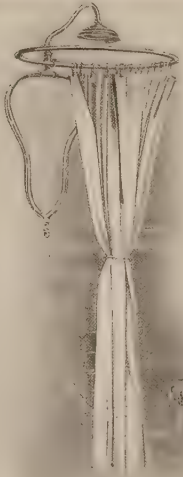
Concrete.

Concrete work is usually measured by the cubic yard of 27 cubic feet. One bushel of cement and two bushels of sand will cover three and one-half square yards one inch thick, and four and one-half square yards three-fourths of an inch thick.

Brick Work.

Brick work is generally measured by one thousand bricks laid in the wall. Bricks vary in size according to the locality and manufacture. An ordinary brick is $8\frac{1}{4} \times 4 \times 2$ and some are a little shorter, a little wider and a little thicker. In fact there is no standard size. A rough rule is to calculate 22 bricks, without considering the mortar, to the cubic foot. Another method of determining the number of brick is according to the square foot face of the wall. Eight common bricks to the foot in a four-inch wall, fourteen common bricks in a nine-inch wall, twenty-two bricks in a thirteen-inch wall and twenty-eight to thirty in an eighteen-inch wall. Walls of greater thickness in the same proportion.

One and one-eighth barrels of lime, five-eighths yard of sand will lay one thousand common brick. Corners are not measured



This Wolff Shower

one of the several Wolff models, will add an invigorating zest to the bath that will be a source of keen satisfaction throughout all the years it will be used. Wolff Showers, in common with other Wolff fixtures, are extra full value for the money. May be added to your initial bath equipment with little increase of cost, or at any time after fixtures have been installed.

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and let appropriate fixtures be a part of your building plans. Wolff fixtures have long been known for their high standard of quality and are easily obtainable anywhere. Your plumber has our complete catalogue and will be glad to furnish them.

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Pottery: Trenton, N. J.

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HESS HEATED HOMES ARE HEALTHFUL HOMES

The warm air is circulated evenly and thoroughly and penetrates to every corner. Ample moisture is added to the air, which is thus rendered normal, and in this respect, superior to the atmosphere from steam, hot water, stoves, or ordinary furnaces.

HESS WELDED STEEL FURNACES ARE HEALTH FURNACES

because every seam is welded tight, sealed with melted steel which never opens nor permits the leakage of gas and dust; because porous cast iron is not used as a radiator for direct contact with the air you breathe.

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are recommended for the smaller classes of houses, cottages, and bungalows. One register only is used, which supplies hot air through the center and returns cold air to the heater through the ends. No horizontal air ducts nor pipes are used, thus saving expense and space in the cellar. Less fuel is required than with stoves, and the circulation of heat is better than with stoves or radiators.

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Sudden temperature changes are one of the causes of cracks in stucco. The reason?—because the stucco and the base on which it is laid do not expand or contract *proportionately*.

Kno-Burn

Expanded Metal Lath

has the same co-efficient of expansion and contraction as stucco. Sudden temperature changes have no tendency to break the bond between plaster and base—a bond that the mesh of “Kno-Burn” makes unbreakable under ordinary conditions.

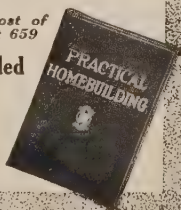
If you are interested in building for *permanence*, let us send you “Practical Homebuilding”—a treatise on building the right way from sub-cellar to attic.

Send ten cents to cover cost of mailing and ask for booklet 659

North Western Expanded Metal Company

Manufacturers of all types of Expanded Metal

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Chicago, Ill.



twice as in stone work. Openings over two feet square are deducted. Arches are counted from the spring. Fancy work, counted one and a half bricks for one. Pillars are measured on their face only.

Mortar.

A cubic yard of mortar requires one cubic yard of sand and nine bushels of lime. It will fill thirty hods. One thousand bricks closely stacked occupy about 56 cubic feet. The same number of old brick cleaned and loosely stacked occupy about 72 cubic feet.

Chimneys.

In chimneys five courses of brick will lay one foot in height. Six bricks in a single course will make a flue opening four inches wide and twelve inches long and eight bricks in a single course will make a flue opening eight inches wide and sixteen inches long. Unless there is a flue lining the wall of a chimney should not be less than two bricks in thickness. The safe bearing load for brick work laid in lime mortar is estimated at one hundred pounds per square inch. Hard bricks laid in Portland cement mortar will support two hundred pounds per square inch. Granite squared in stone work, three hundred and fifty pounds, sand stone one hundred and seventy-five, rubble stone work laid in lime mortar, eighty pounds. The same laid in cement mortar, one hundred and fifty. Concrete laid one part cement, two of sand and five of broken stone, one hundred and fifty pounds. Limestone, squared stone work, 250 pounds.

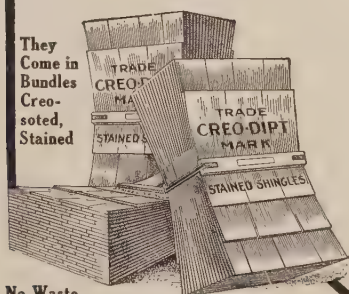
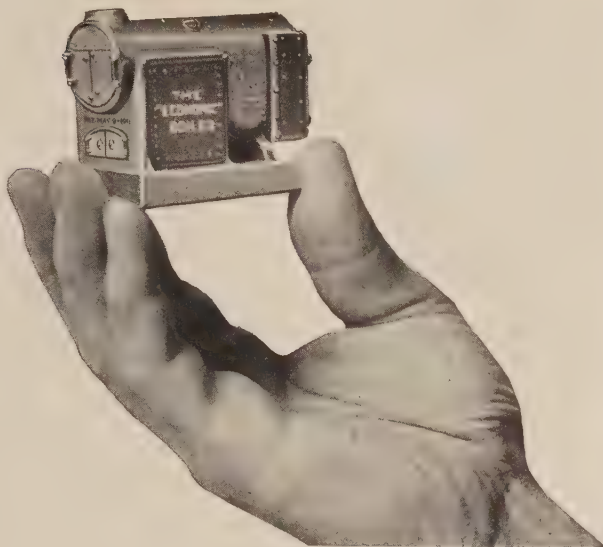
Bearing Load on the Soil.

However strong a wall may be there must be a sufficient support under it, so it is necessary to consider the bearing loads which it is safe to put on the foundation soil. The hardest rock in its native bed will support one hundred tons to the square foot. Rock equal to the best Ashlar masonry, twenty-five to thirty tons; rock that is equal to the best brick will carry fifteen to twenty tons. Clay, when it is in thick beds and always dry will carry from four to six tons to the square foot; clay moderately dry, two to four tons; soft clay, one to two tons. Gravel and coarse sand well cemented by nature will carry eight to ten tons; compact sand will carry four to six tons; sand which is clean and dry, two to four tons. Quick-sand and alluvial soils are allowed one-half to a ton per square foot.

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WOODS

AND

HOW TO USE THEM



EDITOR'S NOTE.—When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH's staff of wood experts.

This department is created for the benefit of KEITH's readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

Summer Homes in the National Forests.

Permits granted by the Forest Service.



TERM permits or leases may be obtained from the Forest Service, granting the use of five acres or less of national forest land for summer homes and other recreational purposes, the permits running for a period not to exceed thirty years. To put these permits on a business basis a fee is required ranging up from five (\$5) dollars a year, according to location of the land and the demand for it, and carry certain responsibilities as to the care of the land. District foresters are authorized to grant permits where the improvements are to cost less than \$1,000, and for a period not longer than fifteen years. Larger permits must be approved at Washington. These rules were issued in May, 1915, in order that those people using national forests might be secure in their tenure for a sufficient length of time to warrant more substantial improvements than had been practiced under the old rules.

Quarantine Against Dry-Rot.

Shipments of lumber should have a "clean bill of health" the same as is required in shipments of cattle from state to state. The Hardwood Record says:

"Decay in wood is a disease that may spread as smallpox spreads among the unvaccinated of the human race. No wood will decay unless the germs of decay are communicated to it from wood

or other vegetable substance already infected. Rot is not inherent in wood or in anything else. It is communicated from subject to subject by the spread of the germs from one to another.

"Decay in wood is caused by a plant growth that takes root among the fibers of the wood, and develops and spreads. The plant which does this is called a fungus. There are many species, some preferring one kind of wood, some another; some spread rapidly through the cells and fibers, producing rapid decay, others work slowly and do little harm. The germ which furnishes the means of spreading the rot from one piece of wood to another is called a spore. It is not exactly a seed, but it amounts to the same thing. When it falls on a piece of wood where the conditions of moisture and warmth are suitable, it grows like a seed, and sends roots into the wood and dissolves its substance, and that produces decay. The spores which do this are usually too small to be seen separately without a strong glass, but each microscopic speck may become a center of infection. Spores develop and fly away through the air in countless millions, and fall everywhere in the vicinity, spreading rot over the surface of sound lumber if sufficient moisture is present.

"Suggestions have been many times made that decaying lumber should not be shipped because of the probability that it will communicate its own disease to sound lumber along its journey or at

If You Have a Fireplace



You can secure four times the usual amount of heat by using a

JACKSON Ventilating Grate

These grates each heat two or more rooms on one or different floors in severest weather, and they will heat an entire residence with two-thirds the fuel of a furnace.

If You Have No Fireplace you can secure the effect of an ordinary open grate by the use of a *Mayflower Open Franklin*. Many people use them in preference to the ordinary open fireplace.

Catalog "K" shows the Ventilating Grate. Send for this, and also for catalogs of Mantels, Franklins, Andirons, or anything else you wish in the fireplace line.

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Looks like expensive tile. Lasts longer. Costs far less. Really artificial lumber with deeply indented tile pattern. Nail it over old plaster or to studding, and enamel. Send 2c stamp for sample and interesting booklet.

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We have issued a Very Interesting Catalogue on

"Pergolas"

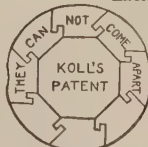
AND GARDEN ACCESSORIES

showing a series of new designs for Pergolas and Pergola Columns.

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Exclusive Manufacturers of

KOLL'S PATENT LOCK-JOINT STAVE COLUMN.



Pergola Album—"G28"—illustrates Pergolas, Garages, Lattice Fences, Veranda Treatments and Garden Accessories will be sent for 10c in stamps.

Catalogue—"G40"—containing very useful information about Exterior and Interior Columns, will be sent to those who want it for 10c in stamps.

Main Office and Factory: Elston and Webster Aves., Chicago, Ill.
Eastern Office: No. 6 E. 39th St., New York, N. Y.

1916 Advertising Message To Business America

By JOSEPH H. FINN

Hail to the New Year of New Business in the New America!

If ever a year was born under a bright star of commercial promise for the United States, it is 1916. The Home Market holds America's destiny as never before.

Every business barometer registers good times ahead. If there is one pessimist of your acquaintance—one man who fails to realize what this wonderful new era of American business pre-eminence means—go at him broadside with these staggering truths.

Figures may be dull—but these proclaim facts that are of tremendous import.

Most of all, remember that real solid and lasting prosperity in this country is based on the *Home Market*—and those who enjoy the biggest share of this prosperity will be they who realize what the Home Market means and who go most aggressively after it.

Let's go constructively after the Home Market—let's educate home buyers—let's do it with a vim—together! Let's use the power of the printed word. If you have goods to sell—let's advertise—and tell American consumers about them.

The way to accelerate prosperity in your direction is to seize upon this wonderful Home-Market Opportunity, *now*. Remember that the export business at best is an uncertain asset, resting upon the final solution of the International Credits problem—first, the establishment and then the protection of our own Merchant Marine.

What we have here at home, *we know we've got*. Our riches are here—in the soil—in the banks. And every day, as conditions better, there is a wider distribution of this national wealth.

Here is the Business New Year—yours to do with as you will.

America has the money. Here, people are thinking buying-thoughts.

With 1916 comes an epoch of unexampled prosperity—for the wise men of this business generation.

With this New Year, you stand on the threshold of Opportunity.

Are YOU going to enter?

It's up to you—*Advertise to the Home Market!*

its destination. Without doubt such a thing often happens."

Howard B. Oakleaf, of the Forest Service, in a paper on the prevention of Dry-Rot says:

"A little care in handling the material in the yard will prevent the incipient stages of decay, which, when transferred to buildings, may develop into full-fledged cases of dry-rot or decay.

"The term 'infected wood' may be defined to cover wood which contains the roots of any fungi which can continue to grow under the conditions in which the wood is to be used.

"The sale or use of infected wood (that which contains fungi which can grow under the conditions of use) should be prohibited by law.

"Our building codes require that steel girders and beams in the downtown office buildings be covered with concrete to prevent collapse in case of fire. Why should we not have a similar requirement that timbered structures be erected in such a way that dry-rot infection is impossible, the code to be so worded that ventilation, heat or preservative treatment be provided for under given conditions?

"If the timber can be rapidly dried out and kept dry under the conditions of use, dry-rot cannot develop.

"When a building is framed the ends of the girders and posts are usually fitted so tight together that drying is exceedingly slow, and it is frequently further retarded by the side plates of the girder supports. This is one of the principal points where dry-rot starts, because all the surfaces of contact have been or are subject to infection. However, the

growth of dry-rot can be avoided by constructing these joints so that air can circulate around the heads of the sticks.

"Where drying is likely to be slow because of poor ventilation or absence of heat, a wood preservative should be applied to the surfaces of contact.

"Fortunately for the lumberman, fresh air—one of the cheapest things in the world—is the best preventive of dry-rot. Heat is also an excellent preventive as it aids in drying out the timbers.

Course on Lumber at University of Minnesota.

The general extension division of the University of Minnesota announces a new course in the general extension division, a correspondence study course of the subject of "Lumber and Its Uses." The course has been prepared for this work by one of the best authorities in this country and is planned to be of especial value to lumber dealers, contractors, carpenters and all others whose work relates to the use of this important material.

The topics treated in this course deal with the structure of wood and its physical properties, standard grades and sizes of lumber, the selection, seasoning and preservation of structural timbers, lumber prices, cost of wood construction, the specific uses of the various commercial woods, and the best methods of applying paints and stains to both exteriors and interiors.

Further details of the course, and the manner in which the instruction will be given can be obtained from Richard R. Price, director, General Extension Division, University of Minnesota, Minneapolis, Minn.

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MAPLE, BIRCH
AND BEECH
FLOORING**



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or locker finished in snow white, baked everlasting enamel, inside and out. Beautiful beveled mirror door. Nickel plate brass trimmings. Steel or glass shelves.

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That Bungalow

which you intend to build next Spring
will need the soft, artistic tones of

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to make it complete and harmonious.

Paint doesn't suit bungalows. It forms a hard, shiny coat that is foreign to their character and "atmosphere." The Stains produce deep, rich and velvety colors that harmonize perfectly with the style of building and surroundings. They are 50 per cent cheaper than paint, and the Creosote thoroughly preserves the wood.

You can get Cabot's Stains all over the country. Send for free samples of stained wood and name of nearest agent.

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Cabot's Stucco Stains—for Cement Houses.



Stained with Cabot's Creosote Stains
Sidney Lovell, Architect, Chicago, Ill.

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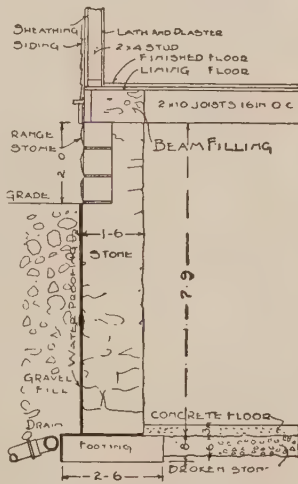
A Handbook Every Home-Builder Should Have

A great many homes are built without an architect's supervision. When this is the case, go out on the job with a copy of this book in your pocket, and you will not only be able to recognize faulty work, but you can give intelligent instructions to the workmen and show them how to do it right.

See that your home is built right. Look after the construction yourself, and with this book to guide you, faulty work will be detected and you can accomplish more and better results.

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(Fig. 6)

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BAYONNE
gives complete satisfaction where other prepared materials and even metal coverings fail.
It is the simplest covering to lay; tacked only on the edges after spreading on the dry boards (no setting in wet paint). Does not shrink, expand, buckle or crumble. It stays flat. Never leaks and stands any amount of hardest wear. One coat of paint is sufficient for ordinary uses.

Hundreds of letters from contractors all over the States prove BAYONNE's superiority. Write for Sample Book "C" giving prices and laying instructions. See Sweet's, Page 539.

JOHN BOYLE & CO., Inc.

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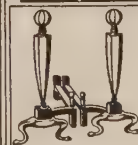
Colonial Fireplaces are economical both in labor saved when installed and in consumption of fuel. Our booklet "The Home and the Fireplace" contains a mine of information. Send for it today.

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Send me your Catalog No. 1525. I am especially interested

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SPLINTERS AND SHAVINGS

A Strong Element in Values.



HE Minnesota State Art Commission contends that there is a "dollar and cents value" to "Art," and cites consular reports in proof of the statement. Every builder consciously or unconsciously proves the same thing. One house is a success. Why? The people like it; it is convenient; it is well arranged; it is good to look at and to live in. In other words it is well designed. It is a good piece of work, well conceived and well executed.

People have set up a shrouded form which they have called "art" and which they have sought to worship in art museums and picture galleries, neglecting the humble applications of this great power and thereby losing its dynamic force. Art is from the same Latin root as artisan. It means work that is well done; work so well done that like a perfectly cut jewel, you may look at it from any point of view and still find no flaw in it. It must be carefully thought out, logical and consistent; it must be so well done that it is always good to look at; it must fully and completely fit the need for which it is intended. The essential parts must be co-ordinated each to the other. It is not necessary to strive after certain effects. The "perfect piece of work" becomes a "work of art."

This "perfect piece of work," when he approximates it, is the chief asset of the builder and makes great architecture. It is the object toward which the home builder is working. Beauty has undoubtedly an economic value.

Beauty In Common Places.

At a luncheon of the School Art League in New York Dr. Hamilton Wright Mabie said: "You will never have an art age in America until you have art in the kitchen. The Japanese have the sublime art inspiration because they pay attention to the beauty of everyday utensils. In Japan every little farm and village rivals in beauty the national

palace and suggests in miniature that exquisite charm which gives us such pleasure. My plea is for more art in the common places."

Furniture.

"Good Furniture" asks the question: "Do the people who buy the vast quantity of polyglot furniture sold each year really do so because it is what they most desire, as a basis for making a livable home?" No one will honestly maintain that they do. We have a certain latitude of choice, but there is much economic waste in the badly designed furniture which is placed before people for their choice. An unfortunate thing about bad design of any kind is that at the first glimpse it often makes a popular appeal to the fancy, which it soon loses. A safe test of design, as with other things, is that one can live with it, with a growing rather than a lessening pleasure. To be a thing of beauty, it must be a constant joy. This is a test. There must be something true and good in any design which continues to give pleasure.

The Lincoln Highway.

The Lincoln Highway is a truly democratic memorial such as Lincoln would have commended. It is a great highway traversing the country from coast to coast, and from latest reports it is now completely marked from New York City to San Francisco. Where that was possible well traveled roads were included in the survey of the great national roadway. Each community took an interest in that part of the highway which affected them locally and yet worked toward the complete whole. Public aid has been given to the long stretches of little traveled country.

In Utah and Nevada, states of tremendous areas and sparse population, great effort has been put forth toward improvement of the Lincoln Highway by the ranchers living along its course. The aid of the counties has been given in as great a measure as possible.

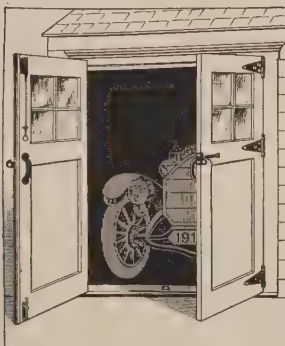
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For Your New Garage—

Stanley's No. 1776-J1 Set contains complete Hardware 'Trim' for garage with double doors. Write for Circular "T."

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The Breath of the Outdoors

THE gate is open and the path leads straight to the House & Garden of your dreams. How to plan your home, how to decorate and furnish it, how to plant a garden, how to care for it and enjoy it to the full—all these will be shown you by the experienced guide who meets you at the gate. **Q**This is the mission of House & Garden. It preaches the gospel of the ideal home. It offers, month by month, in wisely-chosen text and pleasing picture, a wealth of ideas and suggestions for the home-lover in search of the ideal house.

How to Plan and Furnish

House & Garden begins at the logical beginning—the planning of your house. It shows you the proper setting for every type of house—Colonial, English, Half-Timber, Cement, Tudor, Mission, Stucco, Italian, Mexican, Bungalow—even log cabins are not neglected. It tells you about the fire-places, stairways, windows, roofs and porches, advising with you upon every feature—so that when you call in the architect your problem is half solved, and his services are doubly efficient.

The house completed, new problems await you—and here again House & Garden comes as an experienced friend. It takes you into the homes of others, where varied schemes of decoration and furnishing have been employed. It shows you distinctive effects already achieved, and allows you to make a choice of the best. And, better still, it tells you just how to obtain these effects for yourself.

The Ideal Garden

No less important than the house is its setting of garden and grounds. The ideal home is the right house linked with the right grounds. If either is right in itself, but improperly joined—your ideal has vanished. Every kind of gardening comes in for attention—the raising of flowers and vegetables, winter and summer; growth of hot-house and hardy flowers; sowing vegetable seeds in season; the use of fertilizers; making hot-beds and cold-frames; pruning and grafting—all the hundred and one things the man with the hoe needs to know about. House & Garden constantly shows how harmony may be preserved. The best experts have aided to give this magazine the voice of authority. The wise gardener does not guess or take chances. He profits by the other fellow's mistakes and reduces his gardening to a science. House & Garden will aid you to be the wise kind of gardener!

The Breath of Outdoors

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MARCH

1916



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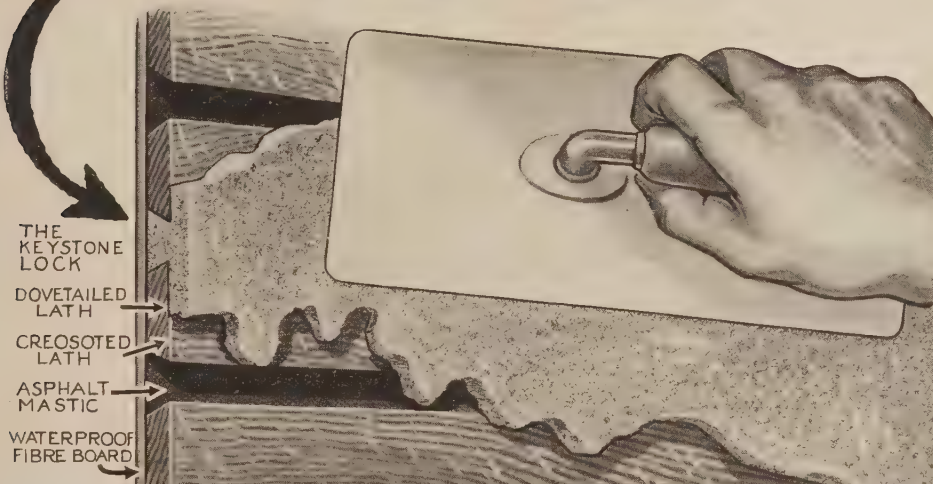
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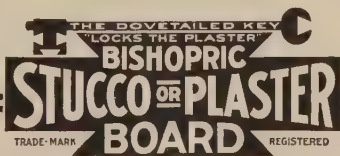
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(Continued on Page 157.)



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Just a Word

Are You Going to Build This Spring?



WITH the breaking of the cold season comes the intense desire for things new, especially for the new house. Responding to the home builders' need, Keith's Magazine has established a custom of making the April number of the magazine a specially big building number. April, 1916, will be our Bungalow Number—filled with new houses and new ideas for the artistic bungalow.

Notwithstanding all discussion as to the origin and meaning of the word "bungalow," it has come to mean to us the home-y type of the small house which is planned along the latest and most progressive lines, in the full knowledge and consideration of the best thought of the time for the conservation for the house-keeper; saving her steps and her energy; providing for the various needs of the household in the most convenient and compact manner. Such a house may or may not have a low, rather flat roof, wide projecting eaves, cut rafter ends, and it may be painted or stained, or plastered. If located in California it may have clinker brick and "shakes" on the outside. If built in the middle west it will surely have dormers and probably a second story. In the east it is very likely to have colonial details. In any case it is compact, convenient, good to look at and a good place in which to live.

The bungalow lends itself to all types of construction and the use of many different materials. The April number will show not only the usual forms of timber construction but also stucco and the more substantial cement construction. A group of bungalows built in Porto Rico, some with a four-inch reinforced concrete wall, will be shown in detail—an article of especial interest as showing what has been done in a different climate and by a different people. The Spanish architect has long been accustomed to the use of stucco and of tile. He knows the possibilities of a plastic material, as the old Spanish buildings in Mexico and California bear witness, and he treats it as an architectural building material.

Attractive bungalows of timber construction are to be shown, both in exterior and interior treatment, in "The Bungalow Living Room," "Fireplaces for the Bungalow," etc. In her series of articles on the kitchen, our authority, Mrs. Edith M. Jones, will treat "The Bungalow Kitchen, with a Breakfast Alcove." There will be a charming Summer Bungalow. Some especial heating plants for the small bungalow will be discussed.

This issue will illustrate an unusually large number of good designs, which have been especially prepared and we feel sure it is going to appeal forcibly to a great number of our subscribers.

KEITH'S MAGAZINE

ON HOME BUILDING

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A charming country house.

Charles Barton Keen, Architect.

KEITH'S MAGAZINE

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A House, Charming in Its Environments

Charles Barton Keen, Architect



HARM is an old Anglo Saxon word which still retains the sense of enchantment; of magic power which it carried in its early meaning. Even with our loose usage of terms, a "charming house" means to us something more than simply a house that pleases us. We feel the touch of a something which we cannot explain nor exactly express; something which satisfies the eye in line, form and color; which satisfies the mind as to general fitness; and co-ordinating

all into a whole are the architectural details, which have been called "the spirit of genius made manifest."

There is a surprisingly long list of architects, on the east coast, on the west coast, and in the middle country whose work shows this touch of genius. Among them is Charles Barton Keen, an architect whose work stands for that peculiar quality which, for lack of a better term, we call charm. The house illustrated is an interesting example of his work.



The breakfast room is also a sun room.



The walls are paneled to the ceiling.

This house gives the effect of being low, rambling and unpretentious. It is built of stucco with the eaves crowning the second story windows. The stone chimneys, with their chimney pots, satisfactorily cap the

gable ends, each with French windows opening on a railed balcony beside it.

The main dining room is beautiful in its white treatment with the walls wainscoted to the ceiling, the cornice with its charac-



The white dining room makes a setting for mahogany furniture.

teristic colonial treatment, the panelled walls and the fireplace with its paneled chimney breast. The room makes a beautiful setting for mahogany furniture. Wide window openings give an outlook on the surrounding garden. The breakfast room, which is also a sun room, bespeaks cheer for the early part of the day. It is simple, almost severe in its treatment. The library is the formal book room, with shelves the

A notable architect in a recent publication asks the question: Can the mind grasp the possibilities of an art that shall be truly American; when the artist conceives America,—not in its superficial, commercial crust, but its true inner life; when the craftsman works, not to gain favor with a public of questionable taste, nor to express the vagaries of his own fancy, but in the love of his craft and the sincerity of his purpose?



A pleasing contrast of materials and treatment.

full height of the room, enclosed behind glass. The living room is also paneled to the ceiling. Less formal books in open shelves add to the livable qualities of the room.

The whole house has a strong colonial feeling but without emphasis being placed on classic details. Nothing could be simpler than the lines of the house itself and of the entrance. It has the pleasing formality which relates it to the best examples of colonial work. It has the simple dignity fitting to the country house, combined with the livableness of the simple home.

The mind may not be able to grasp such a possibility, but there are architects, not a few in number, who have sensed just this thing, and who have brought forth tangible results shown in country houses in many parts of the country. This is a country of great commercial enterprises. It is also a country of homes. It has built a few great buildings, worthy monuments of great business, but the homes which make a worthy setting for a beautiful home life are scattered all over the country, on the great estate, and on the tiny city lot, shoulder to shoulder with their rivals, the apart-



The living room is dignified.

ment houses and the "ready to use" homes. The studied use and combination of building materials is one of the characteristic elements in these successful houses, and is a distinguishing feature of the one illustrated. The color scheme is simple; the


contrasts between stucco and interesting stone work, together with the roof treatment give individuality to the house. The trellis treatment which covers the face of the building is very effective with its accent in the dark window blinds.



The library has a stately fireplace.

Window Boxes and Their Care

Ida D. Bennett

 HE old, weather beaten house may be made spick and span and prosperous looking by the use of paint, but never beautiful and picturesque. But when draped with clamoring vine and blooming masses of flowers the humblest, unpainted house becomes artistic and beautiful.

By filling boxes with soil and placing them in the cellar and planting early in January bulbs of tulips and hyacinths, later those of crocus and narcissi, one may have these popular bulbs blooming in the windows at about the time other people are having them in their gardens. This is especially of interest to the dwell-



The porch flower box.

The invalid or shut-in will find in the window garden a most fascinating form of gardening and by the use of a succession of boxes may follow the season around from the blooming of the first crocus until the fall frosts cut down the summer florescence, when, if one cares, the hardy evergreens and hollies may be substituted to gladden the more sombre days of winter.

er in a city flat whose gardening must, perforce, be that of the window box or garden.

While the tulips and other bulbs are flaunting gaily in the spring sunshine other boxes may be prepared to take the place; these may be planted with any flowers preferred, greenhouse plants or seedling annuals, or one's supply of house plants may furnish the nucleus of a suc-

cessful window box, with vines added. If, however, it is not convenient to have two sets of boxes one may sow seeds of annuals among the bulbs and the latter, lifted when through blooming, make room for the annuals. The large flowered and fringed petunias are always charming in window boxes, as are also the double varieties. Sweet allysum, candy tuft, phlox Drummondii, ageratum, lobelia and a host of other bright things may be depended upon to give good results and will succeed in almost any situation, but one should avoid planting things which make a tall growth in either window or porch boxes unless a screen for privacy is desired.

Plants which do not grow above a foot in height or can be kept back to that height are preferable for windows; from a foot to eighteen inches will do admirably for porch boxes. In either box, trailing vines should always appear and where desired climbers also can be used. For the window boxes climbers of a graceful delicate nature are usually to be preferred, and there is nothing more delicate and graceful than the *maurandia* vine, which clings by twisting the leaf petiole about a support and will cling to the window screen or any slight projection; its lavender, pink or white tube shaped flowers are borne in profusion and are an added attraction. The scarlet *manetta* vine is another graceful climber and when combined with the

white solanum is charming indeed, less delicate but equally charming is the *thunbergia* with its felt-like leaves and disc shaped flowers of white or orange and dark-eyed orange. For positions where a taller climber is desired, one which may be run on cords or wires to a



In any box trailing vines should appear.

second story, the new cardinal climber is a delightful, graceful thing, easily grown from seed which should be started in glass in the house or hot bed and planted out when danger of frost is past. *Cobaea scandens* is another most excellent climber which blooms persistently from base to tip of the plant, its large, bell-shaped blossoms—which open a greenish cream and change through all the shades of lavender and mauve to a deep wine—are very conspicuous and beautiful

and valuable for cutting. Most of the passion vines are desirable window box climbers, especially the tri-colored Southern Beauty with its large, showy flowers of pink, white and blue, nearly five inches across and borne in profusion all summer. This last should be purchased for a dime at the greenhouse and will usually be showing buds when purchased.

All these vines are rather addicted to sunny east, west, southern or western positions, but *Cobaea* and the cardinal creeper will do well even on a north exposure if a modicum of sunshine is possible at some time in the day.

The *Passifloras*, *Cobaeas*, and the larger growing *solanums* are especially desirable for porch boxes where they can be twined about the pillars. Nasturtiums, which are trailers and not climbers, are especially happy when grown in boxes where they can follow their natural bent. For growing these to perfection not too rich soil should be used as this encourages a rank growth of leaves at the expense of flowers, and a careful selection of colors should be made. The hybrids of Madam Gunther are the most desirable mixed sorts, but choose of these the darkest and clearest reds.

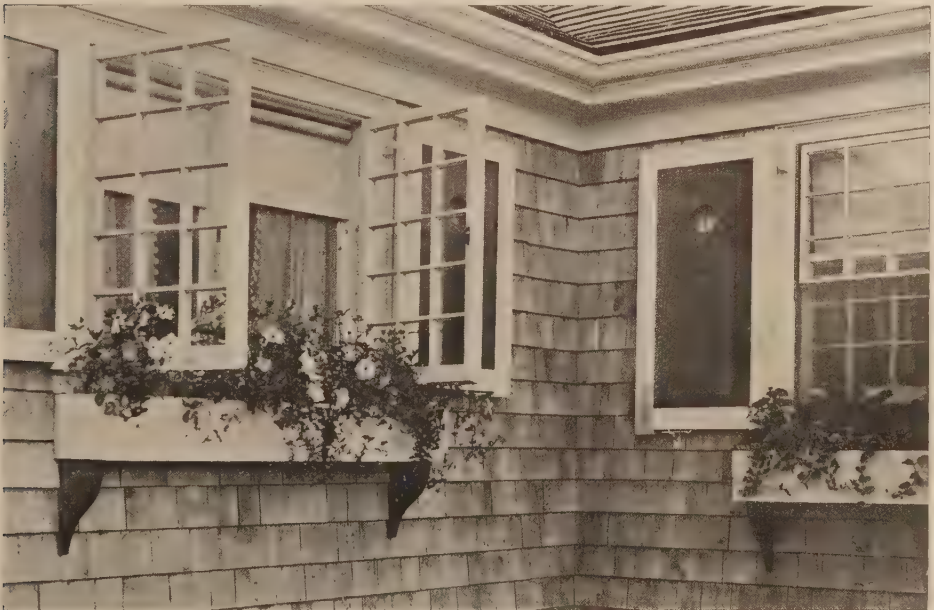
Trailing *vinca* is always popular but should have the ends of the sprays pinched back to encourage a fuller growth. Ivy leaved geranium, especially the silver leaved, is always good and some of the better flowering varieties especially good with boxes made up of greenhouse plants. Corden's Glory, a bright scarlet double flower, and Mme. Thibaut, a lovely shade of clear rose pink, are two

of the best, giving large trusses of flowers all summer. The trailing fuchsia is charming in north and east window boxes early in the season, as also the trailing *abutilon*.

One should always plan to grow something fragrant in the window boxes and for this there is nothing sweeter than the heliotrope, especially under bedroom windows. This plant loves sunshine and so can be used in any sunny exposure.

As a number of plants are to be crowded in a comparatively small space the quality of the soil is of moment; preferably it should consist of good fibrous loam,—that from the under side of sod being best, a little black leaf mould and old, thoroughly rotted manure thoroughly incorporated with the soil. The boxes should be filled quite full, pressing the earth firmly about the plants, as the soil, even when well pressed, settles much more than one would expect.

Abundant water is necessary and this, fortunately, is available by the use of the



One should always plan to grow something fragrant in the window boxes.

The following list of classified plants are suggestive rather than exhaustive and will be of assistance in deciding what to plant.

Trailing Plants.

Nasturtiums.
Vincas.
Fuchsias—Trailing Queen.
Begonia—Marjorie Daw.
Glaucophila Scandens.
Abutilon.
Ivy Leaved Geranium—Souvernir
Chas. Turner, Caesar, Francke,
August Hardy and Jeanne d'Arc.
Weeping Lantana.
Glechoma.
Wandering Jew.
Lobelia.
Asparagus Sprengeri.

Climbers.

Maurandia.
Cypress Vine, white or scarlet.

Cardinal Climber.
Cobea Scandens.
Mina Lobata.
Mina Wanguinea.
Thunbergia.
Dolichos.
Scarlet Runner Bean.
Alleghany Vine.
Wild Cucumber.
Japanese Morning Glory.
Centrosemas.
Smilax.
Solanum Jasminoides.

Blue Flowers

Ageratums.
Lobelias.
Ipomea—dwarf morning glory
Plumbago.

Weeping Lantana.
Cobaea Scandens.
Maurandia vine.
Browalia.
Heliotrope.

White Flowers.

Candy Tuft.
Sweet Alyssum.
Petunias.
Verbenas.
Phlox Drummondii.
Camphor Geraniums.
Geraniums.
Antarrhinums.
Stock.
Lobelia.
Tuberous Begonias.
Schizanthus.

Among the plants which may be successfully grown in boxes may be mentioned the following:

For East or South Exposure.

Tuberous Begonias.
Fancy Leaved Caladiums.
Gloxinias.
Most Flowering Begonias.
Fuchsias.
Heliotropes.
Abutilons.
Petunias.
Verbenas.
Plumbago.
Phlox.
Browalias.
Geraniums.
Ivy Geraniums.
Wandering Jew.

Candy Tuft.
Camphor Geraniums.
Anterrhinums.
Ten Weeks Stock.
Vincas.
Lobelia.
Cobaea Scandens.
Morning Glories.
Solanums.
Maurandias.
Thunbergias.
Passifloras.
Manettia Vine.
Bougainvilleas.
Coleus.
Crotons.

For Northern Exposures.

Nearly all varieties of Begonias.
The various Asparagus Ferns.
All the hardier fancy Ferns, Boston
and the like.
Dracenas.
Farfugiums.
Impatiens Sultanas in var.
Trailing and Erect Fuchsias.
Abutilons.
Manettia Vine.
Sanseverias.
Panicum Excurrens.
Wandering Jew.
Maurandia.

Suggestions for filling boxes:

North Boxes.

I.		
Begonia-Otto Gecker	Dracena	Otto Gecker
Farfugium		Farfugium
Manettia Vine	Asparagus Sprengeri	Manettia
II.		
Begonia Angel's Wing	Boston Fern	Rubra Begonia
Impatiens Sultana		Impatiens Siltana
Trailing Fuchsia	Wandering Jew	Trailing Fuchsia
III.		
Aspidistra	Boston Fern	Aspidistra
	Bougainvillea	
Maurandia		Maurandia
IV.		
Asparagus Plumosus Nanna		Asparagus P. N.
	Panicum Excurrens	
Nasturtiums—dark red and scarlet		

East Window Boxes

I.		
Pink Justitia	Pink Justitia	Pink Justitia

White Double Petunia	White Double Petunia	
Ivy Geranium Mrs. Fink	Ivy Ger. Souv. de Turner	
Trailing Vinca		
II.		
Pink Geranium	Pink Geranium	Pink Geranium
Heliotrope		Heliotrope
Weeping Lantana	Ivy Ger. Mrs. Fink	Weeping Lant.
III.		
Scarlet Geranium	Scarlet Ger.	Scarlet Geranium
White Anterphnum		White Anterphnum
Manettia Vine	Solanum Jasmancides	Manettia Vine
IV.		
Yellow Tuberous Begonia	do.	do.
White Tuberous Begonia		do
White Thunbergia	Yellow Thunbergia	White Thun.
V.		
White Candytuft	White Candytuft	White Candytuft
Scarlet Phlox Drummondii		Scarlet Phlox Drum.
White Verbena	Scarlet Verbena	White Verbena
Nepeta Glechoma		Nepeta Glechoma

proper kind of window boxes. It must be remembered that boxes on the sunny side of the house are under fire, as it were, a great part of the day, much more than plants growing in the ground, and if the windows above them are closed they may be said to be between two fires and it will make much for the comfort and success of the planting if the windows are allowed to remain open during the hottest weather.

During the early days of fall when the nights bring frost the open window back of the box is a great protection. Often a killing frost will be rendered harmless by the simple expedient of leaving a window open and screening the box with a shawl suspended from the bottom of the top sash, or an umbrella thrust through the open window over the box will preserve its beauties for the fine



No one who cared for architectural traditions could have placed this box.

days which are sure to follow early frosts.

The lists shown on the opposite page are merely suggestive and are arranged for boxes under ordinary width windows. In arranging larger boxes it will only be necessary to increase the number of plants. For an ordinary box nine plants, planted in three rows—the plants alternating—is about right. Plants received by mail from the florists should not be planted directly in window boxes but potted in small pots, placed away from direct sunshine for a few days and allowed to start into growing before being transferred to the boxes. Then a hole the size of the pot should be made in the soil and the ball of earth slipped into it without breaking it or in any way disturbing the roots. It is better, too, for boxes to be kept in the shade a few days after planting before placing in a trying sunny position.

North window boxes will always be a delight to the owner as there is no other position in which plants do so well. Nearly all house and greenhouse plants may be grown to perfection there, especially the ferns and begonias, and many of what are known as sun loving plants will do admirably if they receive the morning



Plants can be kept back to the desired height.

or late afternoon sun. Where no trees or porches intervene almost anything may be attempted.

In boxes of pink petunias and like soft colored flowers the wild cucumber is excellent during the better part of the season but should be removed as soon as it shows signs of growing shabby and something else planted in its place; if one takes the precaution to have ready some potted vine which can be slipped into its place the change will not be noticeable, except for the fresher appearance of the box.

Japanese morning glories do finely in window and porch boxes and may be trained on cords to go to a second story window—as they are plants of soaring ambition and seldom find anything high enough for their desires.

They do not require as much root room as most climbers but must have an abundance of water to produce the immense flowers for which they are famous.

This is the beautiful part of the window box idea, that it is simple and inexpensive, adapted to the mansion or the humblest cottage; that one does not need the expensive products of the greenhouse to evolve a successful color scheme, for the simplest garden flowers will be quite as beautiful from the road—possibly more so, than many exotics, and may be had for the labor of planting and caring for

them. Just a few boxes of proper size and construction, a little earth of the right sort, a few flowers adapted to the location, and a reasonable amount of good taste in selection; for not all flowers, though beautiful in themselves, are at their best in any and all positions and circumstances. One must study the exposure, whether an east, west, south or north

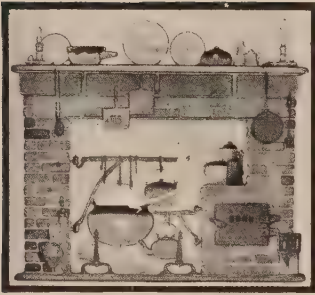
one; the amount of shade; the color and material of the house and any other circumstance affecting results. The red house, perhaps, of all colors, presents the most difficult problem in color harmony. Usually preponderance of green brightened with a very dark red, as that of the S. A. Nutt geranium and the darker shades of nasturtiums will work out satisfactorily and many of the foliage



Over the porte cochere.

plants can be used to advantage. Considerable white is always safe to use. On a yellow house one has more latitude and most shades of blue, of mauve and of heliotrope may be indulged in. Soft pinks and white are also satisfactory. White houses may be brightened with all sorts of bright colors and are really delightful backgrounds to work out a color scheme upon, as also is gray and the natural weathered color of the wood.

Cement houses especially crave the presence of flowers growing under windows and along porch and balconies.




THE KITCHEN



The Distribution of Cupboards and Drawers— Planned for Service

Edith M. Jones

(Copyright, 1916, by Edith M. Jones)

 HE kitchen of the future is going to be very much like the operating room of a hospital, being furnished with materials and equipment that are absolutely clean and sterile.

Useless cupboards, drawers, utensils, etc., must be eliminated. A careful selection of every necessary tool and a definite place planned for every utensil in relation to the other equipment will do much to save time and unnecessary motions and steps.

In order to accomplish the best results drawers, shelves and cupboards should be distributed about the kitchen in such a way that the utensils and materials contained in them shall be within reach when needed.

For instance, the cupboard for spices should be very near

the flour, sugar bins and pastry slab. The drawers for baking spoons, egg-beater, rolling pin, etc., should also be in close relation to the cupboard and bins.

On the other hand the chest of drawers for towels and the dish-washing outfit should be near the sink. The sink should be near the range and the pan closet near the sink. And so we may go on until in the end we realize that the work of the kitchen is easily divided in half though this careful distribution of the question of storage.

Factories all over the country under the advice of efficiency men are facing problems of change and rearrangement. One factory under my personal observation that has been in operation over thirty years, engaged the



A pot closet with metal equipment.

services of a corps of efficiency men with the result that changes costing ten thousand dollars were made. This cost was entirely made up at the end of the second year and the dividends have been since then steadily increasing. The superintendent told me that moving one piece of machinery saved the work of five men.

An efficiency man was asked to give a report on an office I know and when his recommendations were adopted the force of men was cut down and this force has taken care of a rapidly increasing business with far better results in every way. The president of the company told me this was accomplished through a perfected system and a better distribution of files, etc.

What is true in outside business is certainly true in the business centers of our homes. We need to look after our systems of carrying on this home-making business and re-arrange our workshops to gain greater efficiency, and to

conserve the housewife's time and strength.

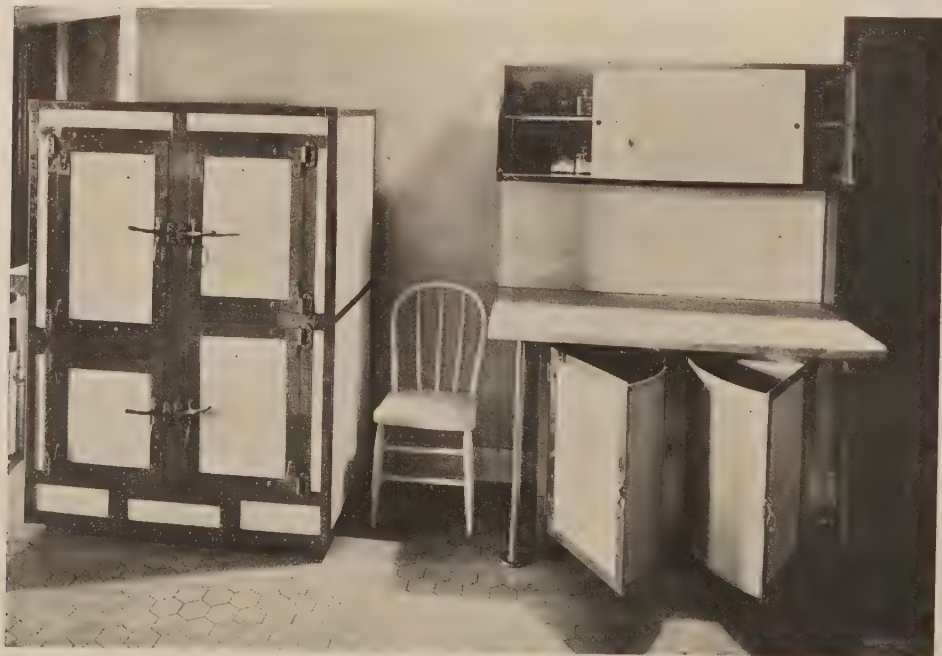
A shelf where there is a need—a drawer to hold a tool where it is to do duty—is of great service. But an unnecessary shelf is a "catch all" for dust, etc., and an unused drawer or cupboard is an added care to keep clean and in order.

A glance into the hospital laboratory reveals the fact that no instruments remain exposed when not in use.

The same should be true of our kitchens. No cooking utensils should be hung about the kitchen exposed to dust, etc. Drawers should be provided for small utensils, and pots and pans should be hung in a pan closet. This insures them from dust and does away with much needless handling.

The Cupboard-Sanitary

The illustration shows a large pan closet with metal shelving and metal vegetable bins. This metal shelving is made with a nicked and iron frame, and loose



A kitchen showing harmony of materials.—Bins and cupboards open.

metal shelving which in housecleaning times can be taken apart and thus is insured against dust and insects of any kind.

Vitrolite, a comparatively new material in this western market, finds a welcome home in the kitchens of the more advanced types. It lends itself to many uses as its perfect whiteness and smooth, hard finish are most desirable. It makes ideal side walls, because it comes in large slabs and so has the fewest number of seams. Vitrolite, as well as plate glass, can both be used very nicely for shelving and the work of cleaning is much simplified, and cupboards kept in immaculate condition. The sanitary kitchen should exemplify pleasure in work, not fearsome drudgery.

Whenever possible it is very attractive to have the materials of the kitchen equipment harmonize. We do this in every other part of the house, why not in the kitchen.

In the kitchen shown, which is of the larger type, the nickel and vitrolite covered refrigerator, the flour and sugar bins, pastry slab and spice closet are all made to correspond. These bins shown are of the newest and best type which the market affords. They are entirely made of metal and are absolutely vermin and dust proof. The frame is made of nickeled angle iron. The bins are made of heavy vat tin, hung on hinges and supplemented by

rollers. The face of bins is of vitrolite which matches the shelving in the rest of the kitchen. The spice closet is entirely vitrolite with the angle iron frame. The shelves of all the cupboards are vitrolite with nickel supports. The pastry slab is white marble and matches other working tops in kitchen. This slab is supported by nickeled pipe-legs which are fastened securely to the floor. The bins however, are movable so that it is an easy



The white kitchen—with bins and spice cupboards closed.

matter to clean them both inside and outside. The handles not only are used to open and close but lock the bins as well.

The cook who has worked in this kitchen for over two years told me the other day she never wanted to work anywhere else. "Everything is so easily kept clean and so pretty," were her very words. And as I looked at her in her striped gown and cook's cap, and then at the shining whiteness of her workshop I felt indeed this kitchen had the requirements of a laboratory of the highest standard.

Special Glass in the Dining Room

NO CRAFT is of greater importance to the architect, nor perhaps to the home builder than that of the glass worker. People are demanding more color in their living, and are putting in their living accessories more color than

his own feeling in the matter if he is to have a real pleasure in his home. Glass, like a picture, should be such that one can live with it, with a constant or a growing pleasure. If the lines are involved and carry the eye on and back endlessly follow-



The windows are stained glass pictures set in leaded borders.

their forebears dreamed were possible. Special glass makes one of the most charming accessories in the home, one of which the home builder avails himself most frequently, and one in which he needs especially to exercise his judgment and good taste, or to get advice from those who know the subject,—yet the final test must come in

ing the design with no place to rest, it will become a daily associate which is worse than a night-mare. If the colors are very pleasing but excite the mind too highly they will become fatiguing and the eye will long for a plain surface or a flat tone.

The accompanying photographs show special glass used in the dining room in a

very effective way, and in different conditions. In the first dining room it is used in the windows in connection with an extremely interesting built-in sideboard with cupboards on each side, which are of themselves quite unusual in that the upper shelf has glass on three sides, including the window behind, and the shelves themselves are of glass. The center windows are in a curved bay



Stained glass fitting into the color scheme.

above the line of narrow drawers and are stained glass pictures set in heavily-lead-ed borders.

The second photograph shows an entirely different treatment. The cupboard doors are filled with a translucent picture done in glass, fitting into the color scheme and decoration of the room as would a fresco or a mural decoration, and adding a pleasing and distinctive note to



The glass is subordinated.

the room, which carries the eye back again and again, to catch the color in its varying moods or to follow the line.

In the third photograph, glass is used not for its intrinsic beauty of color and line, but simply as a spot which should carry some light and fill in the decoration of the wall surface. It gains its chief value

thinking the problem simple, have not attained such charming results.

The last photograph shows an interesting treatment of china cupboards in a projecting bay, with the wood muntins of the doors corresponding with those of the casement sash, making a decorative feature.

To only a comparatively small number of



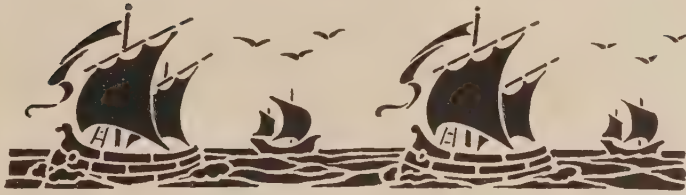
An interesting treatment for china cupboard.

in the decorative scheme by its more or less successful grouping of the lines of the composition. Wonderfully effective things can be accomplished in plain glass, simply with the lines of the copper setting and occasional bands of translucent glass, by the varied groupings of the lines and spaces. This type of composition has been so successfully handled by a group of artists that their work has inspired others, who

people is given the responsibility of creative work. To the majority of people, and especially to the home builder, selective power is the only artistic ability which he is expected to exercise. If he has been surrounded from his youth with the conditions of aesthetic health, the acquisition of good taste, like correct speech, is easy because half or perhaps all of the work is unconsciously done.



(Fig. 3)



Frieze in blue and white.



(Fig. 3)

The Use of the Stencil

Part I—Wall Treatment

John A. Knowles

IN order to illustrate the practical part of the decoration of a room we will suppose that it is intended to undertake the dining room of the house, with a simple frieze; and plain walls with a border around in order to obtain a panel effect; and that the prevailing tones are to be blues and white to harmonize with the tableware used at meals; the case-ment curtains to be white, stencilled with a delft blue border in agreement with the general scheme. There is also to be a plate shelf at junction of frieze and wall, which is to be finished in flat white enamel, on which willow pattern blue and white plates are to be placed at intervals, the doors and door casings will also be finished in flat white. For the frieze, seeing that the prevailing tones are to be blue and white, a design of ships in full sail would carry

out the white parts required in the scheme, whilst the sky and sea would give two tones of blue broken here and there with white sea gulls and wave crests respectively. But there is no need to confine ourselves to this *motif* if another design would be preferred, as many other schemes will suggest themselves in which the required color scheme could be carried out, as for instance, a design of Dutch boys in blue, driving geese, and Dutch girls with white pinafores. We will, however, consider for the purposes of practical demonstration, that the frieze of ships illustrated has been chosen. The first thing to do is to paint the wall with the flat ground tints, upon which the stencilling will afterwards be applied. For this, by far the best of material, especially for the amateur, is one of the sanitary washable water paints which can



A set of stencils. (Fig. M.)





Border. (Fig. 2.)

be bought both cheaply and in a great variety of different tints. They have no objectionable smell, go perfectly dead, and therefore do not require stippling or expert handling in order to obtain a perfectly flat and non-shiny surface, and after some time become water-proof so that they can be washed if required, provided ordinary care be taken. As these paints vary in composition, no definite rules can be laid down for mixing them, but as each packet or tin has the instructions for this printed upon it, if these are carefully followed there should be no difficulty in making a perfectly satisfactory job, as it is to the interest of the different manufacturers that they give the fullest possible particulars in order to prevent disappointment with their products, and as they know the composition of each and what it will do they are best able to advise. Moreover, they supply pattern books, showing the actual tints applied to paper, which can be chosen from at home and judged by being held against the wall in the situation in which they are to be used, and so mistakes are not likely to occur as might be the case if the tints had to be chosen in a shop a mile or more away. Remember that most tints look lighter in a large surface than in a small pattern, but this is an advantage rather than otherwise, as it is better to have the walls too light rather than too dark. For the walls of our dining room a neutral blue will be best, allowing the blue of the sea in the frieze to tell, so as to form a band of colors around the room above the plate rail which will

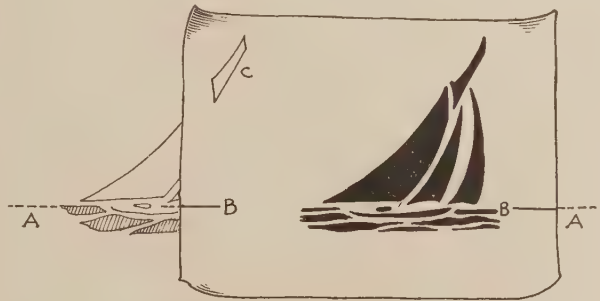
in turn be blended into the ceiling by the band of paler blue of the sky above it. In painting the walls, work from left to right, and if your paint begins to run short, stop at a corner and start with a fresh lot of paint from there, as then any slight difference in tint will not show. We will suppose that the main tint of walls has been applied and also the ground tint for the frieze. The next thing to do is to strike lines on the wall for a guide in setting the stencil borders at the bottom, in order to have them perfectly straight. To do this get a piece of thin string about twelve feet long and tie a loop on one end to slip over a convenient hook or nail, then, walking backwards, rub the string well with a lump of white chalk, turning the string in the fingers as you rub it. For light grounds on which a dark line is required, use a piece of charcoal instead of the white chalk. The correct distance where the border is required having been measured from the edge of wall, stretch the string tightly, holding it close against the wall with the thumb, at one end; whilst another person holds the other in a similar manner. If the string be now pulled away from the wall a distance of three or four inches and allowed to rebound smartly against the wall, a good and perfectly straight line will be produced, which may be dusted off with a clean rag when the work is finished. We must now set about preparing the stencils, and if the worker has never cut a stencil before, it would be perhaps best at first to buy these ready cut, as the experience gained in see-



Border. (Fig. 2')

ing what parts are cut away and where ties are left to hold it together will be invaluable later on when it is necessary to cut a stencil oneself, so for this reason most of the stencils shown here can be obtained ready cut. As, however, later on, the amateur may wish to cut his own stencils from, for instance, a drawing in flat tints in a child's book of nursery rhymes, we will describe how to go about it. The easiest way to enlarge a design such as this to the required size is to have an enlarged photo known as a "Solar Print," made from it by one of the firms such as are to be found in every large city, who make these enlargements, and which generally cost only a few cents. The enlargement is then pinned down with thumb tacks upon a sheet of thick "cartridge" drawing paper or manilla paper on a drawing board or smooth table top, and a piece of blue transfer paper, such as can be bought at any artist's color store, placed face downwards between the enlargement and drawing paper. The outlines are then carefully traced through with a hard lead pencil. If it is required to make a design say of an owl, for instance, face in the opposite direction the transfer paper must be placed *face* upwards *beneath* the sheet onto which it is to be transferred and the lines gone over as before. The drawing having been transferred, it is then carefully gone over and the "stops," as the little pieces of paper, which must be left in order to hold the stencil together, are called, put in. It is a good plan to shade with the lead pencil all parts which have to be cut out, as this will show whether any stops have been accidentally omitted, as otherwise the design would not hold together. Also at the same time a guide hole must be provided at the left-hand side of the design to show the correct distance at which

it is intended that the design shall repeat. The two borders shown here (Fig. 2) will illustrate this. It will be noticed that the top one (which is the one we propose to use for our border on walls) shows two repeats, the bottom one, three repeats and a little bit of another at A. The little piece is used as a guide to be placed so as to fit over the end rose of the last portion of the design stencilled, which will show through the hole in the stencil when it has been correctly placed. Without this, the paper left at the end of the stencil for holding it against the wall would cover up part of the design just applied on the wall and the new portion would come too near or too far



Stencil applied to the wall. (Fig. 4.)

away from the last done, and so not form a continuous running pattern. The top border has been shown for the sake of illustration with no guide hole in order to make this perfectly plain. These guide holes are to be transferred to the cartridge or manilla paper with tracing paper, a portion of the right-hand of the design being traced and transferred across to the left hand side in the same way. The paper is then rubbed over with a rag dipped in raw linseed oil, which makes the paper like parchment and enables it to be cut cleanly and easily, the pieces are then cut out with a sharp knife on a sheet of glass and the stencil allowed to dry. If the stencil is large it is better to tack it to a light wooden frame, to support it whilst the work is being done upon the wall. It is also best

to give it a coat of spirit varnish, as then the water in the paint does not soak into the paper and make it limp.

On either side of the ships are the brushes or tools, as they are called, used for stencilling. Two sizes, half-inch and one-inch in diameter, will be best, and two of each size sufficient. It is most important that the paint be not mixed too thin, as then it would work under the edges of the paper and cause blurred lines; if this occurs the stencil must be at once laid face downwards on an old newspaper and carefully wiped with a rag. Sufficient of the paint should be mixed and kept in a small tin; it is then taken out as required onto a slab or palette made of any odd piece of wood, tin or glass; the tool is then worked into this and remembered that the tool is stamped against stamped on the palette to see that it is not giving too much paint. It should be re-the stencil applied to the wall and not brushed across it. Fig. 4 shows a stencil being applied to the wall, the dotted line AA is the chalk line struck with the chalked string on the wall to give a straight line to work by. BB, a pencil line ruled on the stencil to set it on straight by the chalk line on wall. C, a guide hole made by utilizing the top sail of the yacht as a guide for setting each impression of the stencil exactly the same distance from the last one. This stencil would be a simple one to cut and apply, but sometimes it is required to

carry out a design which is so complicated that if the whole of the parts were cut out of one sheet of paper, the stencil would be so flimsy as to be unworkable, besides which the different colors would work over the strips of paper, separating the different tints and work into the color in another division, destroying the effect of clean-cut masses of different tints. To obviate this, it is better to use two, three or more, different plates, some of the parts being cut away from one and some for another so that when all have been superimposed, the stencilled impressions of the three, one upon another, show the complete design. This method, therefore, is somewhat analogous to color printing such as is used for posters. Fig. M will illustrate this, the first drawing shows the design transferred with the bars and stops and parts to be cut out, one of these being at the bottom in order to facilitate the setting on of the succeeding plates by the use of guide holes. Another plate is prepared with other parts cut away and two guide holes AA for fitting the stencil on over the impression of the first. Similarly a third shows the remaining parts which are left to be done after the first two plates have been applied, with the exception of the apron, bib and turned-up sleeves of the old woman and the road, which are to be left white or the color of the ground on which the design is to be applied.

The House That Bob Built

Ruth Fargo

A Building Experience by One of Keith's Readers



BOB and I built five houses during the first dozen years of our married life. Then we built a sixth, in which we now live. Bob has laughingly dubbed it the "Try-try-again House," because from it we have eliminated all the mistakes of the other five. And we

believe it to be about as nearly perfect as a seven-room, modest-priced cottage-bungalow may be.

On the outside it delights the eye; on the inside it delights the heart; a most livable, convenient, homey house, noted for its compactness (no waste space or unnec-

essary roof, always items of expense); a home where one gets the most for his money. It cost us \$2,000. Bob and I did our own designing, and superintended the building. The house is built and finished throughout (except for cedar shingles) with Oregon fir, even to the floors, which are rug-covered.

The main part of the building, exclusive of porches, is 26x28 feet, a desirable size

for breathing space with so many vistas.

From the hall a stairway leads to the chambers above. Two high diamond-latticed windows, one opening east and one north, are at the lower landing. A built-in seat at the foot of the stairs has a removable top, the inner space, cut into compartments, being utilized for a number of things. Also, a low closet under the stairs opens into the den; this is fitted with shelves and forms a



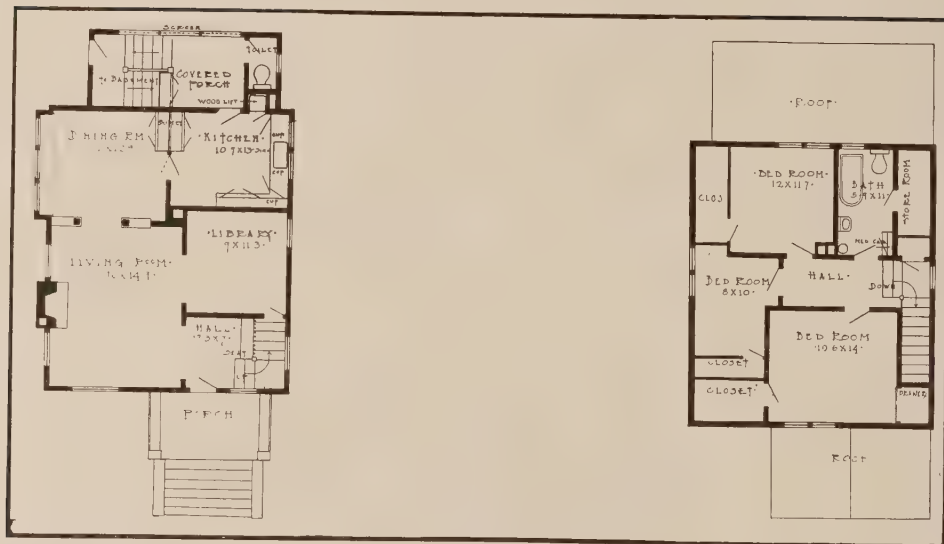
The front porch is the joy of the housewife.

for a small lot, ours being 50x125 feet. It leaves room for a good lawn, a shrubbery border and a garden at the back. The house faces east. Hence, the front porch, small but unusually artistic, is the joy of the housewife who spends a good bit of time in the swing-seat on sunny afternoons.

From the porch one enters a hall which connects with the living room by a large open archway and gives the effect of space, as does also the columned opening into the dining room, and the open (portiered) archway into the den. The arrangement makes the interior appear much larger than it really is,—one cannot feel cramped

magazine cupboard,—my magazines are, thereby, always in order, always at hand, never cluttering up unnecessary space. You see, absolutely no space is wasted, all is utilized; and these extra “places to put things” prove a never-failing joy.

One thing, and one thing only is shown on the plans which is as yet a “future hope,”—a fireplace. It was not put in when the house was built; if added, its cost must be added to price of house. Two high casement windows are so placed that they come on either side of our (future) mantel. Cornering in all four rooms on the first floor is a large double flue extending down to the basement floor, arranged for



furnace connection (furnace not included in cost); also so built that stoves may be placed in any first floor room, if desired,—the double flue doing away with any possibility of smoking draughts.

The south side of the dining room is one long, large basket-window with a shelf underneath along its full length. This room is light and cheery on even the dullest day in winter. It connects directly with the kitchen by a two-way swinging door. The buffet indicated is built double, opening into both kitchen and dining room, a pass shelf dividing a china closet above from a set of six drawers below, the bottom one being especially designed to hold table cloths. A like number of drawers opens on the kitchen side.

In the kitchen the large cupboard is built clear to the ceiling, shutting off a common catch-all for dust—the top of the cupboard. The lower part is well fitted with flour and sugar bins, moulding boards, drawers, etc. And the sink (after a "scrap" with the plumber) was placed high enough that I wash dishes *and yet stand erect*; too many back-aching days have I spent due to the half-hitch demanded by a too low sink.

The casement windows above the sink afford free ventilation; though the kitchen, being on the north side of the house, is seldom hot to work in.

On the screened back porch (which catches the westerly sea breeze every afternoon) is located the cooling cupboard, without which a western Oregon home would not be considered complete. Through the perforated bottom and top and slat shelves the cool draughts continually circulate. Here, excepting a few of the very hottest days in summer, I easily keep butter and milk without ice. This cupboard also holds my fresh vegetables (such as are not stored in the cool basement) and cooked food.

Note that the stairs leading to the basement are also a part of the back porch, thus being under cover, an item of comfort during the heat of summer and the storm of winter. The basement itself extends under all the main part of the house. It forms a storeroom for fuel, a place for wash trays and a rainy-day clothes line, a furnace room, etc. Near the head of the stairs on the back porch is located an extra toilet. This is an added expense, but we decided to have it put in.

On the second floor are located three bedrooms and bath. These rooms are tucked in under the roof, the house being but one and one-half stories high, but due to the large gables on both north and south sides, the rooms are of convenient and comfortable size. Note that the low places under the roof have been utilized for closet space, the one over the stairs at the northeast corner being fitted with drawers, and one opening off the bathroom being made into a storeroom for trunks, etc. The back of the corner closets on the south side of the house are fitted with shelves where bedding, etc., may be stored away. The large closet in the front chamber, however, is high enough and large enough to form a comfortable dressing room.

From the second landing in the stairway opens the linen closet, two steps below the hall floor. It is tall and large and fitted with plenty of shelves—that item dear to a housewife's heart. To the right of the door opening into the bathroom is located the medicine closet, and behind the door at the left is the hot water tank, the pipes extending directly to this from the kitchen range immediately below it on the first floor. This tank of hot water takes the "chill" from the bathroom at all times of the year—for which purpose it was so located. Note that the plumbing is so arranged as

to demand a minimum amount of piping—always an expensive item, the bathroom being immediately above the kitchen.

The exterior of the house is finished in narrow weather-boarding; (the wide weather-boarding, being apt to warp and split, is less economical in the long run) painted a tobacco brown with a trim of light buff. The gables are shingled and stained brown, the roof stained moss-green.

Note, also, the manner of finishing the front porch,—the heavy decorated beam with the rounded arching below sloping down to the "collars" surrounding the square solid-looking posts. This rounded arch finishes the porch at the sides as well as in front. Do not make the mistake of painting it all one color, as we first did, or it will seem much too heavy, top-heavy; but broken by the brown of the house (as illustrated) it is a thing of beauty.

"The House That Bob Built," to parody the achievements of Jack in the famous old nursery rhyme, is proving itself very satisfactory. As it stands today it has been copied a number of times. No better house, we believe, can be built for the money. It brings forth continually favorable comment, both from builders and from the casual observer. By the way, "Bob" is a college professor, with a hobby for house building.

An Attractive Home with Entrance at One Side

ONE of the problems which the architects of modest homes are trying to solve is a way of giving the living room an unbroken exposure across the front and presumably the most desirable part of the house, without subordinating the entrance to the point of losing its necessary importance. The home shown gives a satisfactory solution. The steps and porch are recessed enough to give a

sense of protection from rain or sun, yet mark a chief feature of the house.

The vestibule entrance is wide and low, coming as it does under the stair landing. The living room is entered from the rear through a columned opening, which adds seeming width to the hall. Windows on three sides make an unusual feature of the living room, with a recessed bay across the front and a wide fireplace at



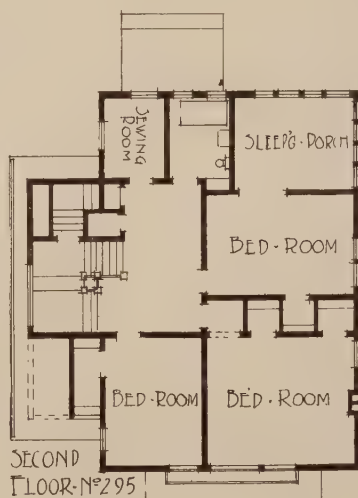
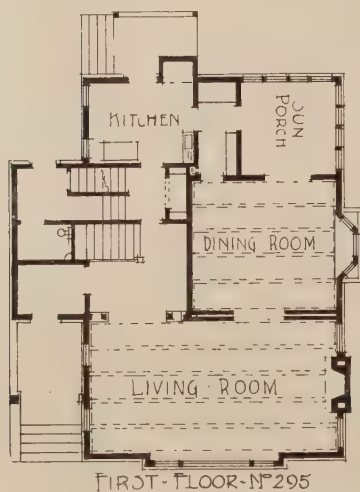
A simple house is often most pleasing.

Lindstrom & Almars, Archts.

one end. Folding doors separate the dining room from the living room, both have beamed ceilings. The dining room has a small bay on the side which brings sunshine into a side room in a way that could

not be done otherwise, and opens onto a sun porch at the rear.

A butler's pantry between the kitchen and dining room gives good cupboard space and a work shelf under the window.



A refrigerator niche is built from the kitchen, which allows it to be iced from the outside and also relieves it from the heat of the kitchen.

The arrangement of the stairs is particularly good. A short flight of stairs from the hall near the kitchen door meets the landing of the main stairs. A shallow closet which may be used for coats opens from this passageway. Down four steps on the way to the basement is the grade entrance and on this landing is placed a lavatory, convenient to the "man of the house" or the children, on entering.

On the second floor are three bedrooms and a bathroom, a small sewing room, and a sleeping porch opening from one of the sleeping rooms. The larger of the front rooms has the luxury of two closets, while the other front room has a wide closet under the roof. The linen closet opens from the hall while a small cup-

board is beside it. A similar cupboard opens from the bathroom, in a very convenient way. The bathroom is so located that the plumbing pipes are direct from the basement.

The main rooms of the house are finished in Circassian walnut. The kitchen is finished in birch, which is used also on the second floor. The bedrooms are finished in white enamel. Birch floors are used throughout the house, except for the kitchen and bathroom, both of which have tile floors, and tile wainscoting in the bathroom.

The exterior of the house is simple, yet pleasing, perhaps more pleasing for that reason. The trellis is made a feature of interest as a spot of decoration for itself. The brick work of the foundation is carried up to the sills of the windows, and as a buttress for the steps. The tile of the roof adds an attractive note of color.

With the Dignity of the Colonial Home

HERE is a strictly up-to-date modern home built on colonial lines and with a plain exterior. It is of frame construction, finished with cement stucco. The facade is simple and dignified and, including the piazza, is 48 feet in length. The depth of the house is 34 feet, exclusive of the rear piazza which adds 10 feet.

The treatment of the main facade is symmetrical, with a central porch and vestibule opening into a living room. There are closets convenient for coats and wraps on either side of the vestibule. On the right is the library with a wide cased opening. Both rooms have wide fireplaces with projecting chimneys which are features of the gable ends.

Beyond the living room and opening from it by French doors is the piazza. French doors connect it also with the

dining room. Sliding doors separate the living and dining rooms. The dining room connects with the kitchen through the butler's pantry, which has good cupboard and shelf room. Beyond the kitchen is a wide piazza. The refrigerator may stand on this piazza or place may be built for it in the pantry, with outside ice door. In the pantry and near to the kitchen door is, perhaps, the best possible place for the refrigerator, for it is then convenient both to the dining room and the kitchen.

The main stairway is carried up from the living room opposite the entrance. In addition there is a rear stairway opening from the kitchen which extends to the attic, under which is the stairs to the basement, also opening from the kitchen. There is a full basement under the house



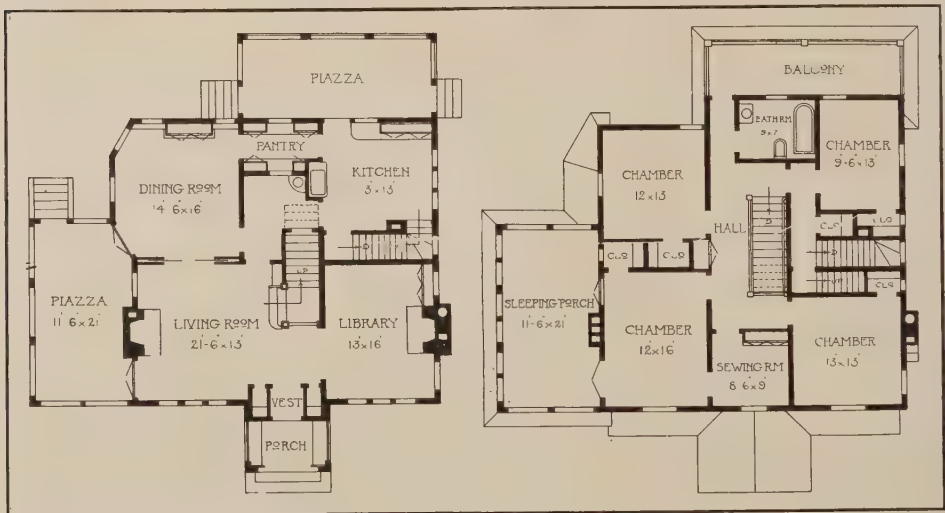
A modern home on Colonial lines.

Chas. S. Sedgwick, Archt.

completely equipped in the usual way. The principal rooms of the first story are finished in oak with a dark mission stain. The floors are of oak.

The second story has four good chambers, with a sleeping porch over the piazza, opening from the main chamber. A convenient room, which may be used as a sewing room, is located between the front chambers, opening from the hall and

from the main chamber. A good bathroom opens from the rear hall. It is over the kitchen and the plumbing is direct and very compact. A balcony over the kitchen porch is reached from this rear hall. All of the bedrooms have good closets with a linen closet and an extra hall closet, and special shelves in the sewing room. This story is finished throughout in white enamel with birch floors.



Under the gable roof is ample room for a third story to be finished if desired. The dormer windows give good light and together with the windows in the gable ends completely light the space.

The sleeping porch is glazed and adds to the completeness and comfort of the house. The shingles of the roofs, including the porches, are stained moss green with creosote stain. All of the outside

trimmings, cornices, casings, etc., are painted old Virginia white. The floor of the entrance porch is of Oriental brick, and there is an attractive seat on either side.

According to the architect's estimate, this house could be built, exclusive of the plumbing and the heating, for from \$7,000 to \$7,500. It has been planned to make a good home.

A Solid Little Bungalow for Any Climate



A bungalow of re-sawn weather-boarding and stone.

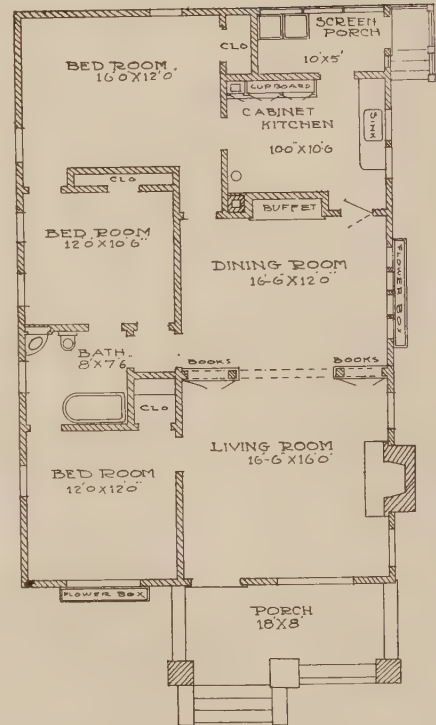
Bungalowcraft Co., Architects

YES, it is a bungalow,—built on the so-called pure bungalow lines with its overhanging eaves and gables and with the inside convenience that has made the modern bungalow so popular,—and yet it is as solid as a house can be built and will stand up against wind, storm, cyclone, snow or flood as staunchly as the most timid could desire.

Brick or field stones may be used in the porch and chimney work if desired, instead of artificial stone, without detracting from the general attractiveness of the building. The exterior is of re-sawn weather-boarding, stained. The roof is covered with cedar shingles also stained. The cut of floor plan shows the inside arrangement very clearly and it

should be observed that when unexpected company comes to the front door, madam can scoot to her room to "doll up" without showing herself. Strange how comforting some of these small conveniences are at times. The house is 30 ft. by 46 ft., exclusive of porches. There are no "jogs" or irregularities in its outline and all this means the most possible house for the least possible money. The living room is about 16 ft. square with fireplace and a pleasing, but not elaborate mantel. It has plastered, tinted walls, good lighting and opens into the dining room by a colonnade arch with built-in bookcases. This room has paneled wainscoting, plate rail, built-in buffet, etc., and opens by a double swinging door to a perfect gem of a kitchen, with every convenience built in and finished in white enamel from floor to ceiling. There are plenty of closets throughout the house.

The rear bedroom is large—evidently for the children. If not required so large, enough space could be utilized for a cozy Pullman breakfast nook at the end of the hall and still leave a bedroom about 10 ft. by 12 ft. The inside trim is of pine, stained and finished, and the walls are of



hard plaster, either tinted or papered. Tinting, if renewed every two years or so is by far the most sanitary wall finish.

A Dutch Colonial Home

IN the accompanying design we have a modified treatment of the Colonial house, namely, a Dutch Colonial Home. This type of house, originating with the Dutch colonists, chiefly in New York state, has been built for a number of years in our eastern states, and in recent years is becoming very popular in our northern and western states.

The exterior walls are of frame covered with galvanized lath over which white stucco has been applied. The bright-red brick base course together with the green shingled roof gives a touch of color to the exterior.

The pergola is to be covered with climbing vines, thus forming a shelter from the heat of the afternoon sun. The floor of this is of bright-red brick laid herring-bone, while a seat is constructed across the farther end.

The interior plan has many popular and attractive features. The long living room with its good fireplace, colonial in treatment, as well as the colonial stairway are both exceedingly attractive features that meet the eye of the visitor on entering. The large chimney is so constructed as to provide for the corner fireplace in the sun room, which is reached from the



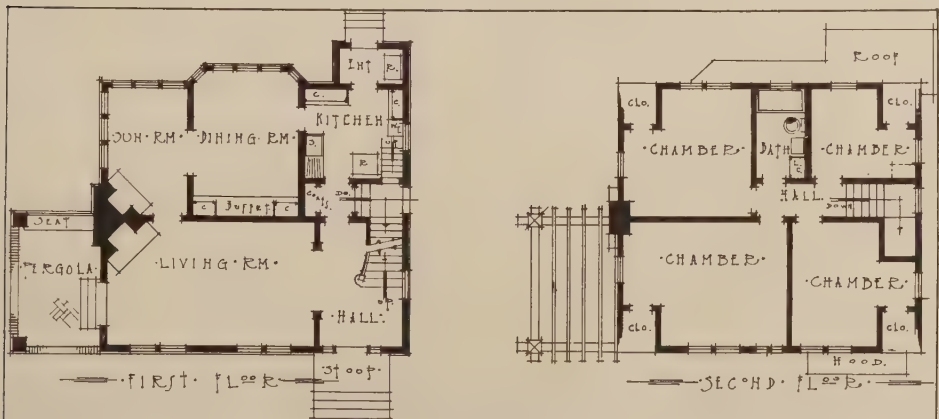
A home with Dutch Colonial treatment.

W. W. Purdy, Archt.

living room through a French door. This large chimney also plays an important part in the treatment of the end gable. The end of the dining room is a bay entirely filled with windows. This room is reached from the sun room by a pair of French doors. With this arrangement an extra amount of wall space is provided in the living room to accommodate a baby grand piano and a large davenport. The combination stairway is exceedingly attractive as well as convenient. The stairs

to the basement have a platform under the main stairs which provides for a grade entrance. The kitchen is very complete with built-in cupboards, work table and so forth, while the rear entry provides space for the refrigerator. The floors throughout the first floor, except the kitchen, are of birch with pine in the kitchen for linoleum. The finish is of birch, either natural or stained mahogany, with some white enamel.

On the second floor are four well ar-



ranged, well lighted chambers opening off a small center hall. These are finished in white enamel with birch mahogany doors, and birch floors. The bath has a good grade of plumbing fixtures with a built-in

tub across the end. The walls and the floor are of tile.

The basement is partitioned off with the usual laundry and drying room, fruit and vegetable room, and boiler and fuel room.

A Re-designed California Brick Bungalow



A brick bungalow with stone trimmings.

E. W. Stillwell, Archt.

BRICK is one of the most ancient and enduring of all building materials.

Of later years there has been a revival of its popularity—notably in homes of moderate cost. Yet we don't see much of it used in the true bungalow type of architecture, except in porch and chimney work.

Here is a bungalow built in California that, with a slight alteration in the original exterior and in the new plan here illustrated, would make an ideal home under any conditions or in any climate.

Outer walls are glazed buff face brick bonded to the common brick, making a

solid 9-inch wall. Plaster is applied to wood lath which is nailed to wood furring set against the rough brick work. Furring-out forms a dead-air space which is a non-conductor of heat or cold and prevents any possibility of moisture getting into the plaster. However, even if plastered direct to the brick, it is unlikely that enough moisture could be conducted to the rooms to make them damp or musty, for this bungalow has a roof overhang of three and one-half feet and ceilings are only nine and one-half feet high.

The brick is trimmed with brown sandstone, used in the porch work, fireplace,

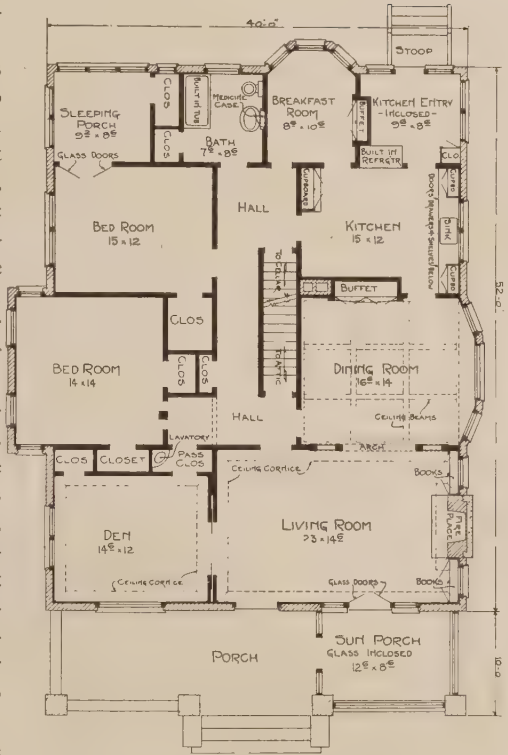
etc. The roof is red Spanish tile. Dormers are set low.

The roof pitch of the original as shown in the photograph is perhaps too flat for other localities than southern California, and the new plans correct this fault. As the pitch is increased, it automatically provides a better attic space, and gives height enough for full-height rooms. In the new plans, the dormers are set higher on the roof and are wide enough for rooms, two or three of which might be bedrooms or sleeping porches.

The plan provides for every convenience that can be arranged for in a house of this size. Notice how well the idea of accessibility of the rooms has been carried out. By correct planning, one can largely solve the servant problem. To save steps is to save time; it makes housekeeping a pleasure to mistress and maid. A compact arrangement enables the owner to get more for less money in the beginning. It also saves some expense in furnishings.

In the original house, one end of the porch was glassed in as an after-thought. The front living room window was intended to be a stationary sash of broad plate glass, like the one in the den. At no greater expense in the new plan, French windows are provided for an in-doors connection with the living room. Instead of leaving one side of the porch open, a glass partition makes it a room. So now we have a real sun room instead of an open porch corner.

All the interior built-in woodwork is designed up to the minute—leaded glass bookcase doors, adjustable shelving; columned and buttressed arch; a six-foot buffet with large and small, long and short drawers; a beveled French plate mirror recessed; leaded glass doors. The kitchen sink extends across the room, with doors, drawers, etc., under and cupboards above, clear to the ceiling. There



is a vent for the range; outside icing for the refrigerator; a broom closet on the enclosed cement-floored entry; a dainty little buffet for the breakfast room; in the bathroom, a medicine case built into the wall; closets—lots of them—eight, besides all the storage space in the attic.

The architect estimates that the cost under Middle West conditions might be kept as low as \$4,500. If one selects expensive finish, plumbing fixtures, heating system, etc., it might run to \$6,000.

In beauty and home comfort, such a house is more desirable than many we see, perhaps larger, all of them costing a great deal more. None can excite more favorable comment nor better advertise the owners as people of dignified and discriminating, artistic judgment. We are known largely by the homes we live in.

Homes of Individuality

Selected by W. J. Keith, Architect

With a Motiff from Old English Work.

WE seek to catch the charm of the old English houses in our modern homes and at the same time to embody in them all the comfort and convenience available according to the most advanced ideas of modern thought. Stucco and timber work are excellent materials

living room. The stairs lead up from the end of the living room near the entrance, with a door also on the kitchen side, making it convenient from both parts of the house. A door under the stairs gives access to the basement stairs and a lavatory from both living room and kitchen as well as direct communication between the two.



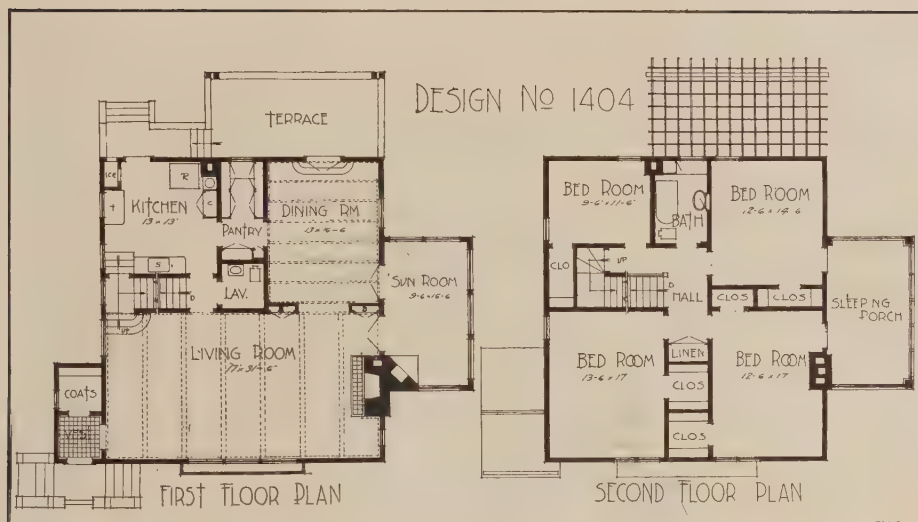
Stucco and timber work have interesting possibilities.

of which to build a house. At the same time they have possibilities, in their contrast of color and surface, and in their adaptability, which makes for the picturesque.

Here is a design capable of making a charming as well as a most livable home. The entrance at one end of the living room makes a note of interest on the exterior, and gives a satisfactory entrance to the

The fireplace at the opposite end of the living room is backed by a corner fireplace on the sun porch, French doors beside them connecting the living room with the sun porch. Similar doors connecting the dining room allows the sun porch to be used as a most charming and cosy dining porch, with the advantages both of sunshine and an open fire.

A large butler's pantry is placed be-



tween the dining room and kitchen, with well arranged cupboards and work-table. The kitchen is lighted on two sides. The refrigerator may be iced from the outside.

Change of level of the ground in this especial design allows the garage to be built on the basement level, its roof making a terrace, reached from the French doors in the dining room, which is pergola covered.

On the second floor are four bedrooms and bath. Each is well supplied with closets. A sleeping porch may be used from either or both of the chambers connecting.

The house is suitable either for a city residence, or a home on a country estate, the white stucco and dark stained trim of the exterior will blend well with any artistic surroundings, and give an air of distinction to the house.

The interior is complete in every respect, from the vestibule floored with red promenade tile, to the garage in the rear portion of the basement. The attractive living room, cozy, inviting sun porch, and spacious dining room, lend a cheerful, home-like atmosphere to the design.

A Cottage Whose Size Proves Surprising.

When some of the rooms are under the roof one may be greatly surprised at the amount of space in a house which does not appear to be large. The cottage here shown has a living room seventeen by twenty, a good dining room and kitchen, and three bedrooms and a bath on the first floor. Under the roof three good sleeping room are finished, the dormers and gables giving good light and air.

It is suggested that the owner may have a private suite on the first floor with bath and dressing room, leaving the second floor for family and guest rooms, and for maid's room.

A beautiful apartment can be made by taking all the space of the two front rooms for this purpose, leaving bath as it is, and using rear left hand corner bedroom for dressing room. This could well be done with the three very nice bed chambers on the second floor; by putting a little dormer in the rear roof, the room marked for "storage" would make a splendid bathroom for the second floor.

The house is very compactly arranged, with the entry and hall effectually separ-



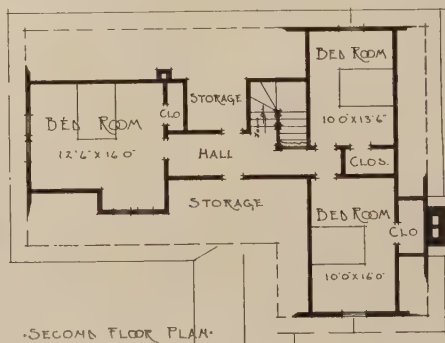
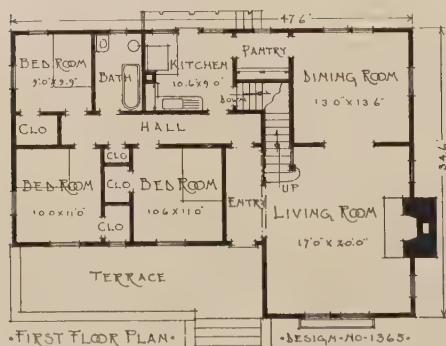
Ivy grown chimney and gables are features of the English cottage.

ating the sleeping rooms from the other part of the house. The living room is of good size and seems larger on account of the cased opening to the hall. The stairs are convenient to both, while the door at the farther end of the entry leads to the sleeping part of the house, with a door to the kitchen. As suggested by the big outside chimney there is a good fireplace centering one side of the living room with windows on either side.

Beyond the living room is the dining room. A butler's pantry of good size separates it from the kitchen, containing convenient cupboard and serving room. The kitchen is equipped with the usual con-

veniences. The range is particularly well lighted and the cupboard over the sink is conveniently placed. The door to the basement is near the hall, easy of access from either part of the house.

The exterior of the house is stucco, but cobblestones have been used in most effective fashion for the porch railing and massive outside chimney; with the magnificent ivy clambering up its walls, being almost always a distinctive feature of the English cottage. The gray plaster of the exterior, framed by a brown oak stained wood and a soft moss green or dull faded red for the roof shingles make a most effective combination.



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Treatment for Sleeping Rooms

 HE decorating and furnishing of a sleeping room in a simple and charming manner is looked upon by the average home builder as a very ordinary problem. Yet, not one person in ten can approach this interesting

task in a thoroughly practical manner.

We are prone to think of the details and not of the completed effect. Some of us are blessed with a vivid imagination and can see the completed chamber in our mind's eye, while others not so fortunate



Sleeping room furnished in "Colonial" mahogany.

INSIDE THE HOUSE

look upon the four bare walls more from a utility standpoint, one space suggesting the place for the bed, another a table, and between the windows the place for the dresser. The wall paper, window hangings and floor coverings are very often the last consideration.

with a touch of old rose, the floor well covered with a deep pile rug in shades of buff and warm golden brown with the colonial four poster, dresser and chairs in deep rich mahogany.

For Bright Sunlight.

For the bedroom where the bright sun-



The sleeping porch with its "day beds."

Color Scheme.

For North Light.

In determining what color to use in a chamber the principal factor should be careful consideration of the quantity and quality of sunlight available. The guest room as a rule is not given the choicest location and generally has a bleak and cheerless exposure. Imagine how cozy and delightful this room would be if the walls were treated in corn color, relieved

light must be tempered, a good gray green or a pure French gray would be cool and refreshing. In contrast to the plain walls, a soft shadow taffeta for the bed spread, hangings and slip covers will make an ideal treatment as its many shades of rose, greens and blues on a cream ground are unusually attractive, yet not too decorative. A little touch of color in the form of a border next to the picture moulding would make a pleasant note.

INSIDE THE HOUSE

Woodwork.

As regards the treatment of the woodwork, nothing can approach ivory enamel, with the doors, tops of window seats and mantel board in a beautiful mahogany finish and all brought down to a dull rubbed effect.

The accompanying photos are views of chambers in a beautiful Kenwood home in

The overdraperies are made of old rose silk poplin with a flat stiff lambrequin, embellished with pipe pleats and dull gold galoon. Soft voile curtains hanging straight to the sill, admit plenty of sunlight and air. It is furnished in mahogany of a colonial type, with four-post beds. A beautiful Kermanshah rug, with old rose predominating completes the room.

Sleeping Porch.

Through French doors at the right, but not shown in the picture, is given access to an open air sleeping porch, with nine pairs of casement windows, permitting a splendid view of a private garden and beautiful Lake of the Isles. The walls are in rough sand finish, treated in oil in a soft creamy tan.

The draperies and slip covers are made of a sunfast silk stripe, in green and

gray with a small floral design in embroidery effect. The unlined draperies are hung in pinch pleats and arranged on traverse rings and cords to permit the opening of the windows.

The features of this room are the beautiful mahogany "day beds" equipped with the necessary springs and mattresses and concealed by the silk slip covers. A pretty fireplace in cream colored tile and ivory enamel with its crackling log fire will give this delightful room a cheerful



"Daughter's room" in gray enamel.

Minneapolis; the owner's suite with sleeping porch adjoining and the daughter's room; all handled in a delightful manner.

Owner's Chamber.

The owner's chamber has ivory wood trim with mahogany doors, rubbed to a dull finish. The walls are hung in a silver gray grass cloth carrying an undertone of rose with floral decorations executed by hand in soft red, rose and wisteria, while the ceiling is in a soft ivory.



atmosphere. A deep tufted chenille rug almost covers the floor.

Red Roses and Blue Birds.

The daughter's chamber, is, as one of her young friends expressed it, "simply adorable"; the wood trim being in old ivory with the walls hung in a simple gray jaspe stripe paper, treated over the doors and windows with clusters of pink and red roses and blue birds, and executed by hand in a very sketchy manner.

The overdraperies are of English chintz in rose and blue on a cream ground, showing flying bluebirds in the foliage. The theme for the wall decorations was taken from this chintz.

Grey Enamel Furniture.

The furniture is in gray enamel with the background of the carved flutings brought out in dull olive. A pretty floral motif is painted on a few of the prominent panels in a delightfully restrained manner. This room is unusually attractive with the cozy desk space enclosed by the built-in closets and the recessed window offering a splendid view of lake and garden.

The alabaster ceiling light and side lights are mounted on antique silver while the floor is nearly covered with a plain deep pile chenille rug in three shades of soft rose.

Buying by Proxy

Keith's Guide on Home Decoration and Furnishing Brings Some Notes from the Shops

Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration," a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given *free of charge*. Enclose stamp for reply.

A Room in Apple Green.

THE writer had the pleasure of inspecting a most unusual and beautiful chamber, recently completed by a prominent western decorator and while it was a decided novelty it nevertheless had an atmosphere of simplicity and comfort. The wood trim was finished in dull hand rubbed enamel in a delightful shade of apple green, with the walls hung with canvas to guard against cracks and painted in a flat tone of paint in soft old ivory without any decorations whatever.

Portieres for Closets.

The closet doors were removed and to guard against dust the portieres were hung with flat brass discs to a grooved track secured to the under side of the casing and operated with a traverse cord. The door and window hangings were made of

a gorgeously colored hand block linen printed in green, rose and mauve over a ground work of black and white stripes, each stripe being about an inch wide. This material was fifty inches wide, one width being hung in each closet door, allowing plenty of fullness and lined with sateen in apple green.

Window Hangings.

The window hangings consisted of a pair of half width side curtains with a flat lambrequin across the top. This lambrequin or flat valance was made up plain over heavy buckram, the lower edge cut in a graceful outline and finished with a fringe made up in the same colors as the linen but with the black strongly predominating. Rosettes with the cords and tassels made to match the linen were gracefully arranged on the face of the

INSIDE THE HOUSE

valance. An old fashioned six-inch picture moulding dating back "before de wah" was dug up somewhere and made into a cornice with a return at each end. This moulding was ornamented with crudely shaped garlands of roses in high relief, either carved by hand or of a pressed composition, and after being decorated was placed at the tops of the windows with the draperies hanging firmly underneath.

Furniture.

The furniture is built on straight, simple lines with reed panels in the head and foot board of the bed. The straight-backed but comfortable chairs with their rush seats and ladder backs, carried a suggestion of the colonial days. All of the furniture is finished in soft lustrous brownish black (not pure black), the rush chair seats being left in their natural color. A charming feature of this adorable sleeping room is found in the little festoons of flowers painted on the furniture. The color and design of this decoration are the same theme as in the draperies except that to the furniture it is applied in miniature but with the apple green predominating. Small garlands of roses are applied to the wood panels on

each side of the cane panels in head and foot of the bed; likewise on the drawers of the dresser, chiffonier, and writing desk. Each slat of the ladder back chairs carries a cluster of three little roses tapered off on each side with a little spray of leaves in apple green. The crudely carved garland of roses on the window cornices already mentioned are treated in the same way as the furniture; the background being in black while the high relief work is treated in polychrome.

Floor Covering.

The floor covering is a seamless chenille rug with deep soft pile. The center or field of the rug is a soft creamy tan with two bands of apple green in slightly different shades. Taken as a whole, the treatment, though somewhat unusual, has a quality of permanent charm and repose.

Glass and Draw-Curtains.

Very dainty Swiss muslin curtains are hung close to the glass and drop straight to the sill. This material is very sheer and does not interfere with the light or ventilation. Draw curtains made of soft casement cloth in a delicate ivory shade are hung between the glass curtains and overdraperies and are arranged to draw back and forth.

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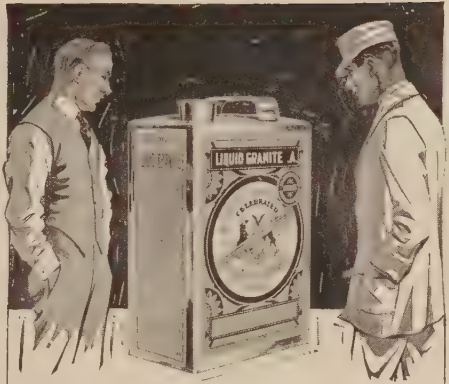
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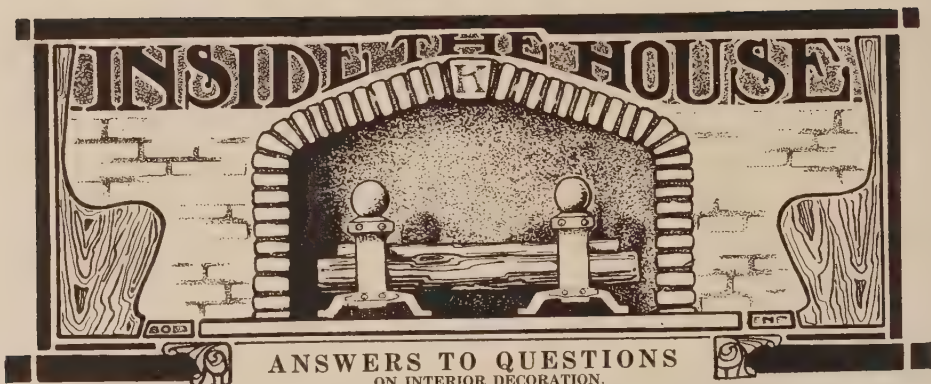
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Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

Treatment for An Old House.

H. W. W. I have noted that in the pages of your magazine you are of a great deal of assistance to a great many doubtful "home builders," and I am therefore taking the liberty to write you and ask for a few of your valuable ideas, knowing that they will help me a great deal in my present dilemma.

We have recently come into possession of a large house and are planning to occupy it in a few months. I have drawn, in rather an amateurish way, a plan of the house, showing the location of the doors, windows, closets, etc., and giving a general idea of the size of the various rooms.

The house faces the southeast, and is on a corner of two main streets. Our first predicament has been the floors. They are the old-fashioned pine floors, and at present are carpeted.

The parlor has two large side windows and four windows in the bay. It has a marble mantel and fireplace which has been obstructed by radiators, over which hangs a large gilt framed mirror. We have a few odd pieces of mahogany furniture, no period, which we shall probably use in this room. At present the floor is covered with a gray carpet with a red figure.

The stairway is white, with walnut rail.

Living room is an unusually cheerful room in its outlook. The space above the mantel is filled with a large mirror, black walnut frame, and here also a radiator is

placed under the mantel. There is no real fireplace in the room. We intend to use this as a living room, with fumed oak (Craftsman) furniture. It has a brown carpet with a darker figure. Would you advise dyeing the carpet? From this room leads the alcove, which we shall probably fill with book shelves.

The porch in front of the dining room takes the light from this room, so that it is really the only dark room with which we have to deal. It was finished in walnut stain, but we are having it repainted white; the chair rail we are in doubt about. If we furnish the room in mahogany, and the doors and all woodwork white, should we paint the rail white, or stain it mahogany? Would like suggestions as to whether it would be advisable to carry this room out in Colonial style. It has a large open fireplace, and our furniture is on Colonial lines.

Ans. We are pleased to offer some general suggestions on remodeling your interior.

Regarding the floors: the only thing to do in our judgment, is to lay a thin $\frac{3}{8}$ -inch hardwood floor over the old ones and have the carpets woven into rugs. The grey carpet with red figure would work up into a very pretty rug for the living room, though you would need something different on the parlor floor with mahogany. Failing in this, your suggestion of dyeing the carpets is the best thing to be done.

The mantels are good features, provided you remove the radiators to another



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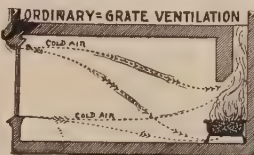
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place in the room. This is easily done at no great expense. Such vandalism as placing them there is almost incredible. In the living room by all means have a grate and at least a gas log under the mantel.

In the dining room the chair rail should be ivory white like the other woodwork. The walls should have a very light treatment, as the room is so dark. One of the Colonial landscape papers in soft grays with hints of rose coming through, would make this room very charming with the white woodwork and Colonial mahogany. Ceiling white also, and soft rose over-draperies at windows. The gray woven rug would work in admirably with this scheme as the red figure would give the right touch of color.

To Furnish a Dining Room.

C. A. M. I am about to buy a dining room set and wish to get some information regarding the kind of wood to select. Have a large house; dining room opens into parlor and sitting hall. Parlor is furnished in mahogany in Colonial design. Woodwork in dining room of oak. I do not care for mahogany for dining room.

What wood would you suggest, oak or American walnut? Will the latter stay in style as long as the oak? I want to use the William and Mary design because of its simple lines.

Ans. Replying to your letter of inquiry concerning dining room furniture, the American walnut is a very satisfactory wood and takes a beautiful finish, nor is there is any fear that it would not permanently remain in style. We doubt very much, however, if you will as readily find the special style you wish in the walnut, as in the oak. The William and Mary furniture comes in oak in what is called the "Jacobean" finish, which is darker than fumed oak and richer, but softer than Early English. It would harmonize well with your Colonial mahogany in living room and be very handsome.

You probably know that it is expensive. A dining room set of this furniture would

cost about \$75.00 for the table, \$125.00 for the sideboard and \$15.00 apiece for the chairs. Those having insets of antique cane in the chair backs are desirable.

Help With Draperies.

E. W. J. I am sending a sketch of my house. Will you help me with the draperies, etc.? I have a brown rug, with a tiny bit of green and tan in small figures; brown leather furniture,—two chairs, a long leather seat, and table to match the wood; some wicker furniture; a small grand piano. My living room is so narrow—can you help me plan my furniture? Must I use over-draperies? What color would you suggest for the living room? I have a blue rug for dining room; had thought to use tan burlap between the panels, with blue tapestry border.

Ans. Your house does not seem difficult. We are sending you, direct, sketches with pencil lines showing our idea of placement of the principal pieces of living room furniture. The brown rug with touch of green will be very good in the northwest living room and could be supplemented with a small one, say 6x9, at one end.

Make the wall a soft ecru and the ceiling between the beams a paler shade. Over-draperies at the windows are not at all necessary, but we should advise hangings in the arch between living and dining rooms. These could be a pretty brown. You are really compelled to use brown and creams in this room by the leather upholstery of furniture and the brown rug, but you can light it up with some green pillows on the leather seat and green mixed with dull reds in cretonne to upholster the wicker chairs and for cushions on the seats each side of fireplace.

Your dining room on the north must have yellow tones to use the blue rug with. Some of the blue and yellow Chinese crepes would be pretty at the windows with an old gold wall.

Exterior Woodwork.

W. F. P. We wrote you last year for information concerning our new house



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INSIDE THE HOUSE

which we have about ready for the roof. Would be pleased to have your opinion on the following questions:

The side-wall from ground to second story is seal-brown brick; second story the timber-work dark brown and perhaps also the window frames in the brick. Now the front door and sidelights are in oak frames. Should the outside of the oak door and frames be stained to correspond with the other outside woodwork or be golden oak to correspond with the inside woodwork?

Should hot water heating pipes be left exposed or built into the wall?

There are two windows on the street side on first floor, each 10 feet wide, having one mullion and filled with casement sash. What color should the sash be to correspond with the light or dark brown creosote-stained wood, brown brick, gray stucco and red roof?

Ans. In reply to your questions, first, regarding finish of front door and side-light frames, a creosote stain is not proper to be used on these. The front door should receive very careful treatment. We would advise an English brown interior stain for outside of door and side-light frames; then two or three coats of the best varnish. Even then, the front door will need frequent doing over if exposed. As yours is sheltered by the porch, it will probably stand very well.

The inside window frames can be stained like the timber work; but the sash should be painted cream white. Otherwise, you will have a very gloomy looking house. Inside, the sash and frames should correspond to the finish of the other woodwork. The French doors the same.

We would not use a golden oak stain on the interior woodwork. Fumed oak is much softer and will blend with golden oak furniture if this is to be used.

In regard to exposing the risers of your hot water plant, our own practice is to cover them in the wall.

If your casements swing out, you will need some kind of casement fixture to

open them without opening the screens. Two mullions and narrower casements would have been much better in a 10-foot opening; it will be difficult to make such wide casements weather-proof and difficult to operate them.

Window Shades.

G. N. W.—We have three windows in our house all in line together, just separated by the casing. Would you suggest a window shade for each window or one shade for all three windows. We also have French windows and doors. Would you hang shades on these and if so, would you hang them on the doors and windows or on the casing. The frames are very narrow. What color of window shade would you use for gray stucco house?

Ans.—It is very rare to use one shade for a group of windows. We think each window should have its own shade. They are often made as narrow as 15 inches.

If the French doors open on a porch, it is not necessary to use shades on them; simply veil them with thin net or mulle, shirred slightly on small rods, set top and bottom of the sash.

A medium green shade is always correct with gray stucco, especially if there is a green roof.

To Curtain the Front Door.

C. E. C.—I have built my house after one of your plans. Please give me some advice about it.

It faces the southeast. There is a small plate glass window in dining room over the buffet. Will it be necessary to use special draperies for that as it is higher than the other windows? It is about 3 by 4 feet. The front door has a long oval glass. How shall I treat that?

Ans.—In regard to windows over the buffet, it should be treated the same as the other windows. The best way to screen the oval glass of front door is to cut a piece of heavy lace, Arabian, to fit it, allowing enough to turn an edge all around and tack it over the glass with small tacks.

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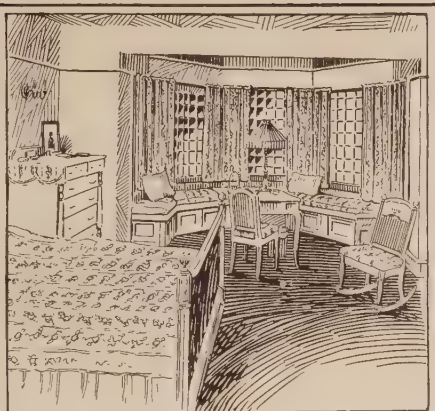
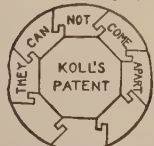
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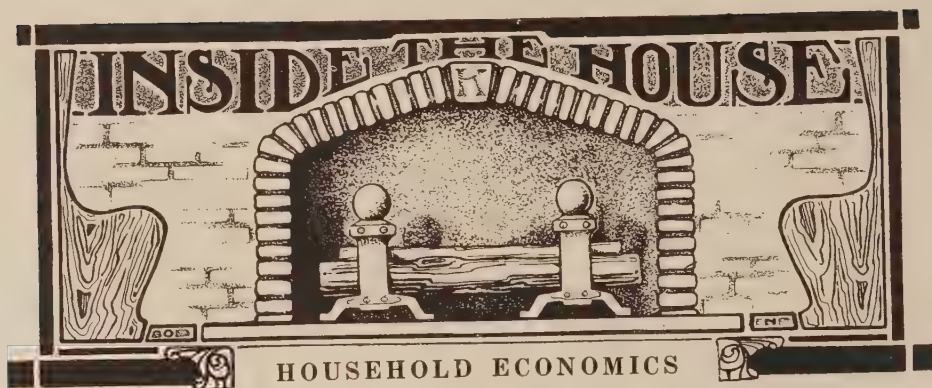
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Satin-like



Interior Trim



Sanitation, Efficiency and Dish Washing

EVERY one is familiar with the housekeeper's wail: "I wouldn't mind anything, if it were not for the washing of the dishes." Cooking is easy, entertaining is a pleasure, if only it were not for the dishes. They ruin both hands and dispositions. They are the drudgery of housework and the "bugbear" of the housekeeper. With all our up-to-date ideas on sanitation we still permit the "dish rag" to reign in the kitchen, with its not less unsanitary compatriot, the "tea towel," both of which plot treason to my lady's hands, as well as absorb her time and energy.

While a child can do it, yet washing the dishes is really quite a complicated operation and it has not been easy to work out a mechanical process which will accomplish it, and quite as serious a difficulty perhaps lies in the fact that when a machine has been manufactured its cost is a deterrent if not a prohibitive feature. In general the people who can afford to buy a dish-

washer are those who employ a maid who "may just as well do the dishes in the old way." Now that women are demanding efficiency in housekeeping as well as in other forms of business, several practical dishwashers have been put upon the market, at an expense which is not beyond the reach of the usual household.

The dishwasher here illustrated has been just put on the market. The most practical dishwashers of the simpler form are operated on much the same principles as the one here shown, that of throwing a spray of water against the dishes with sufficient force to thoroughly cleanse them first, and later to rinse them in such hot water that they dry quickly in the air; when they are ready to set from the trays into the cupboard.

If used where there is not running water connection in the house, the dish water may be poured into the machine, and when the dishes are washed, drained off into a pail. With a water sys-



Dish washer—with silver baskets, knife racks and cover.

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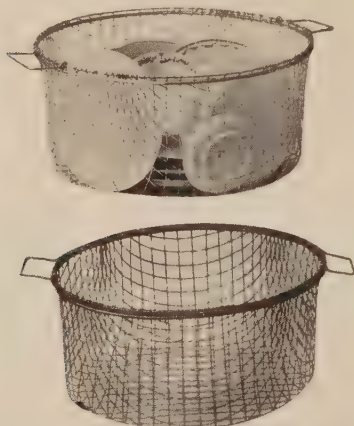


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LOOK FOR THE BLUE CENTER—TRADE-MARKED

INSIDE THE HOUSE

tem in the house both supply and drain may be connected directly with the plumbing pipes so that after the dishes are stacked in the baskets, set in place and the cover put on, the water is turned on from the faucet, with a water gauge to show the proper



Baskets—one partly packed.

amount and the water drained off by turning a lever. The machine may be operated by hand by means of the crank attached,—only a few turns being necessary to complete the operation,—or it may have a motor attached and be operated by electricity.

The view of the interior of the machine shows the principle on which it is operated. The paddle seen in the bottom revolves with

a considerable power, either by hand with a high geared crank, or by means of the motor. This throws a spray up through the dishes. The plates seen on the side carry the spray up to the under side of the cover from which it again strikes the dishes as a return spray, in this way getting a double action from the water, direct from the paddle and returned from the cover.

The dishes are prepared for the machine in the same way as for the dish pan, the careful housekeeper clearing them of food particles, preferably with a rubber scraper. They should be placed in the basket loosely so the water can get to every part of the surfaces. About four quarts of boiling water are required in the tub and a little soap or soap powder put into the water. The basket is then set in, being held in place by the projecting rim, the tub is covered, the paddle is revolved for about a minute, and the dishes are washed.

The revolving of the paddle throws the water against the sides of the tub and against the baffle plates, from which it rebounds in myriads of streams, shooting over and between and against the dishes, cleansing them completely. The soapy water is drained out, fresh hot water poured into the tub, and a few turns of the paddle completely rinses the dishes. Take the basket out, set it in the sink or on the drain-board, and in two minutes the dishes are ready to be put away.

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200 VIEWS



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Lenten Fare

THE beginning of Lent affects a great many people whose interest is not in the least a religious one, as the practices of servants and other dependents must be considered. Aside from any religious motive it is a

good thing from the culinary standpoint to keep Lent. Most families do not eat enough fish, which is a really valuable article of food for brain workers as well as for people suffering from nervous troubles. Moreover, some sorts of fish food are ex-



Creamed fish in pastry shells.



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(Signed) SAMUEL ISELY, Monroe, Wis.

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tremely cheap, a consideration of importance in these days of high prices and reduced incomes.

In the coast cities of the United States we have accessible a very great variety of salt and fresh water fish, varying in flavor, in price and in size, but all equally acceptable to people who like fish. Those of firm flesh and fine flavor lend themselves best to broiling, the mode par excellence of cooking a fine fish. Such are mackerel, blue fish, shad and trout, with others of

delivered at the last moment. If this is not practicable, sprinkle it thoroughly with salt, when it comes from the market and keep it in a cold place till it can be cooked. A large piece to be baked or boiled can be cooked as soon as it comes from the market and be heated through before serving. If it is kept covered closely in the interval the flavor will not be affected. On the other hand, pan or broiling fish should be cooked at the last minute and served immediately. If you pos-



Fish croquettes, garnished with celery and lemon.

more local reputation. White fleshed fishes generally can be either baked or boiled, their goodness in the latter case depending very much upon their sauce. The various sorts of small fish are usually fried.

It is essential that fish should be very thoroughly cooked, although the time required is not long, ten minutes to the pound at the outside for a boiled or baked fish. The simplest test is to penetrate to the backbone with a silver fork. If the fish separates from the bone readily it is cooked. A single appearance of underdone fish is generally sufficient to create a permanent distaste for anything with fins and scales, so it is well to be on one's guard. Uncooked fish deteriorates very quickly and should be

possess a metal dish cover by all means use it when you serve fish, which depends much for its goodness on its temperature.

Technically fish appears at the dinner table only as a single course, just after the soup, but practically it is the main dish at dinner in modest families. For this purpose it is well to have a large cut boiled or baked, serving the smaller fish at breakfast or luncheon. But these smaller fish may be served as an entree at a formal dinner. Sole, a small fish, whose equivalent with us is a filleted flounder, is the popular fish course in England. Some sort of creamed fish in ramekins can also be served for the fish course.

But, after all, everyone knows about the ordinary ways of cooking fish. It is in the making of various made dishes that one

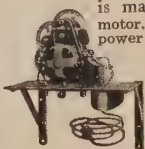
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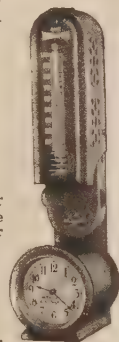
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achieves economy, because one can use cheap pieces which are not available for cooking whole, as well as left-overs from another meal. The pieces which are left at the head and tail of a large fish like cod or halibut, when it is cut into steaks, are sold very cheaply as compared with the rest of the fish, and are of exactly as good quality. Thoroughly cooked in boiling, salted water and freed from skin and bone they are ready to be flaked up and can be used in a number of ways.

Creamed Fish.

Creamed fish is a very common dish and is very seldom good, for the reason that very few people know how to make a good cream sauce. Toast cream is not cream sauce, although cream toast made with cream sauce is a very delicate article indeed. The process is a very simple one, and never varies. In a clean saucepan you melt a rounded tablespoonful of butter; into the melted butter you stir a rounded tablespoonful of flour and you cook them two or three minutes, stirring all the time. By slow degrees, still stirring, you add half a pint of hot, not boiling, milk. Pepper, salt and another tablespoonful of butter and the sauce is done. Add the flaked fish, set the saucepan aside closely covered and dish at the last minute. You can make it richer by adding cream to the milk, or you can do the same thing with evaporated or unsweetened condensed milk.

The Cheapest Form of Protein.

Sometime within the year statistics were published by one of the New York papers, showing the cheapest form of protein, giving the most nourishment for the least money, to be the grade of salmon known as Pink Alaska, selling at from eight to ten cents for a pound can. It is what is known in Alaska as chinook salmon, and is wholesome and palatable. It is less oily and not so firm as the red Alaska and so needs to be cooked. The most economical way of preparing

it is to drain off the oil and free the fish from skin and bone, flaking it into rather large pieces. In a small saucepan bring the oil to the boiling point and stir in a rounded tablespoonful of flour, cooking for two or three minutes. Add slowly, stirring constantly, a cup of hot water and when it is thick and perfectly smooth a seasoning of pepper, salt, a little lemon juice and half a tablespoonful of butter. Heat the flaked fish in this and pour the mixture over triangles of buttered toast in a casserole.

Fish Croquettes.

Extremely good croquettes can be made from this pink salmon. Flake the fish very fine and mix it with a cupful of potato mashed very smooth. Make the sauce with half the quantity of water and no lemon juice so that it will be very stiff, and stir the fish and potato into it. Taste the mixture, add more seasoning if necessary and pack it closely into a buttered soup plate. Let it get very cold and form it into cylindrical croquettes, dipping in egg and cracker dust. Chill them again and fry them in deep fat. Serve them on a bed of celery or watercress and garnish them with slices of lemon. Any other sort of fish can be made into croquettes, using butter instead of the oil from the salmon.

Using Up Odds and Ends.

Inconsiderable bits of fish, such as are left after a meal of pan fish, can be freed from skin and bone and used for patties. Plan to make the shells when you are making pies or lay away a bit of paste in a corner of the refrigerator, as it will keep several days. Or you may buy pastry shells of the baker. They are seldom as good, however, as the homemade ones. Make a little cream sauce, stir in the flaked fish, piecing out with a few cooked oysters cut fine, if you have not very much, and fill the shells, heating them thoroughly in the oven. Always serve sliced lemon with any preparation of fish.

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Building Material

AND NOTES ON

Heating, Lighting & Plumbing

Concerning Plumbing Fixtures.

WHEN the home builder contemplates the estimates which the contractor presents to him as the necessary cost of the home which he hopes to build, the plumbing bid is perhaps the greatest mystery. He can understand the carpenter's bill. He thinks he knows a good piece of timber from one full of knots, and he knows something about good workmanship. He may refuse the lowest bid and he knows why he does it. But when it comes to the plumbing, what does the uninitiated know? When estimates differ widely,—"it is a different

class of goods," he is told, or, "it requires a more expensive installation." He can only hope that the most expensive is the best.

Plumbing fixtures are manufactured from vastly different materials, with a wide difference in cost, each with definite qualities, and with definite advantages. There are many especial patents on the valves and peculiarities of the fixtures which add to the cost. The models which are widely used, because of the immense number made from the same pattern, are cheaper,—out of all proportion to the difference of construction,—from models



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less widely used and not manufactured in such quantities.

When you are selecting plumbing fixtures you are shown "enameled" fixtures at a very moderate cost, then you are shown "porcelain enameled" fixtures at a much higher price. They are better looking, and the fittings are perhaps heavier and better designed and finished. They are better grade fixtures you are told, which accounts for the difference in price. Then you are shown specially high grade fixtures of "vitreous china" at a still higher price, which are certainly beautiful in their modeling and finish. Any housekeeper knows the difference between enameled ware, porcelain, and china when she is buying dishes, and she buys accordingly. She understands readily why a large platter or covered vegetable dish or fine china is so expensive, while an "enameled ware" dish is not.

"Enameled" fixtures are made of cast iron, the exposed surface is heavily enameled, and the enamel is fired to give as fine a finish as is possible where the surface is not an intrinsic part of the constructive material. The plumber does not consider this a "perfect" material for his goods, so he has devised the "higher grade" fixtures. It is possible, we are told, though an instance has never come to our attention, yet it is possible under unnecessarily hard usage that the enamel finish may be chipped off and the iron underneath allowed to rust. It is also possible that by the use of powerful acids in cleaning the fixtures, that the surface of the enamel may be made rough and so defeat its intended purpose as a highly polished surface which will not hold dirt. If you put your hand under the rim of such a lavatory you will feel the rough surface of the iron. As a matter of fact, even under most severe tests these enameled iron fixtures have proven extremely satisfactory. Each piece generally carries a guarantee, which while it does not repay the cost of resetting, shows that the manufacturer stands ready to back his goods.

When economy is not an especial matter of consideration, the higher grade of fixtures make a beautiful bathroom. In a house where fine china and solid silver are always in use for the family service, vitreous china fixtures in the bathroom will be in keeping with the rest of the house.

Porcelain enameled fixtures, as the name implies, are made of porcelain like a great dish, and the surface enameled and fired in the kiln, where the enamel and the porcelain combine under the heat.

Vitreous chinaware is made from a finer grade of materials than porcelain, and is heated to a very much higher temperature in the kiln, giving it the vitreous qualities, and also giving it a most remarkable amount of strength. As a test, fixtures of vitreous china, and also of porcelain, have been hammered with metal pipe until the pipe bent without showing the slightest damage to the fixture or to its surface. Such fixtures are necessarily expensive, and, if one can afford them, worth all the money they cost.

The plumbing in a house can not be entirely satisfactory unless the fittings are first class. The supply and waste pipe should be ample, and of sufficient weight. The design of the valves and fittings are worth looking to carefully. A faucet which soon becomes leaky is very annoying. The mechanism by which the water is kept in the lavatory and the arrangement of the overflow are of especial importance. The most unsanitary thing in the usual bathroom is the overflow basin back of the ordinary lavatory, with the openings so small that it is impossible to clean it in any way. A device which is very new arranges for flushing the overflow, by forcing back the stream of water. Some types of the ideal waste seem to provide a simpler solution by arranging for the overflow within the pipes themselves and allowing the cylinder which shuts off the water to be entirely removed. The extreme simplicity of this fitting is its greatest merit. There is no plug in the basin to be inadvertently removed at the wrong time, and the unsanitary small openings into the waste basin are entirely omitted. This is a matter to be considered in the selection of fixtures.

The design of the faucet is another important feature. Do you know the satisfaction of a faucet which will not leak? Half a dozen trips of a plumber to fix a leaky faucet would pay for the most expensive type that is made, so a cheap faucet is not an economy.

The many types of closets on the market have gradually been growing simpler in construction and eliminating the defects of the earlier types. The noisy flush-



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ing valve, or rather the noise of the refill, has been largely eliminated. In the latest type the tank has been done away with entirely, by the substitution of a larger supply pipe and a new flushing valve, which if desired, may be set out of sight. Some authorities say that an inch supply pipe will give a proper flush, whereas a half-inch supply is used with a tank closet, while other authorities say, "Do not allow yourself to be persuaded to use less than an inch and a quarter supply pipe." This closet is so new to the market that we are not able to find a bathroom photograph with this type installed.

The complete bathroom here shown has the simplest type of fixtures. The tub is set in a tiled niche and with a shower fixture and curtain makes a complete shower equipment. The fixtures are set in the wall of the cabinet at the end of the tub, so that while the tub is completely tiled in, the fixtures are in an open construction. Cleaning around and behind the tub, and keeping it clean has always been one of the bugbears of the

housekeeper. The newer tubs get away from this difficulty in a number of ways. They are made to set directly on the floor, sometimes before the tile floor is laid, some standing eighteen instead of twenty-two inches from the floor.

Tile is a satisfactory material for floors and walls in a bathroom. Some non-porous wall surface is necessary where a shower is installed, and a wainscot of such material is certainly desirable. This may be of tile, marble, vitralite or only a hard cement painted in white enamel. The wall above the wainscot may be canvassed and painted or finished with a decoration in oil colors, or it may be finished with some of the glazed papers or wall coverings on the market.

In a certain sense the bathroom is the key to the house. Here the homebuilder and his family plan for their own convenience, comfort, and even a moderate luxury, yet knowing that they are adding actual value to their home. If they ever wish to sell a most important question is, "What kind of plumbing have you installed?"



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WOODS

AND

HOW TO USE THEM



EDITOR'S NOTE.—When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH's staff of wood experts. This department is created for the benefit of KEITH's readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.



NEW density rule for yellow pine timber has been adopted and copyrighted by the American Society for testing materials and approved and adopted by the Southern Pine Association.

"It has been recognized for a good many years by both the manufacturers and consumers of southern yellow pine, that a constructive and simple method for classifying various classes of southern yellow pine for structural purposes, would find wide application and fill a long-required need. The three botanical species of yellow pine, namely, longleaf, shortleaf and loblolly, frequently intergrade, so far as their destiny is concerned, and much misunderstanding has resulted from time to time because of the lack of a practical method for determining whether any particular class of yellow pine was adapted for the purpose intended. Realizing this condition, the Southern Pine Association has actively co-operated with the United States Forest Service and the American Society for Testing Materials for the purpose of finding some such method for distinguishing the various classes of pine for structural purposes. The American Society for Testing Materials made a preliminary suggestion for grading the southern pines in their report for 1909. The rule proposed was based on the number of rings per inch. This rule was widely used but was found too indefinite for final adoption.

"As a result of careful study of many

trees of all species, a method has been devised during the past year by the United States Forest Service, which was adopted by the Southern Pine Association in January, 1915, and which was presented in detail to the American Society for Testing Materials at their annual convention and subsequently adopted by the society as standard in August, 1915.

"Based on the density rule, a new classification for structural yellow pine timbers has been established which eliminated the names 'longleaf,' 'shortleaf' and 'loblolly' pines. The new rule provided two classes: Dense Southern Yellow Pine and Sound Southern Yellow Pine. Dense Southern Yellow Pine includes the best pieces of what has hitherto been known as longleaf pine, and excludes the occasional pieces of inferior quality, for structural purposes. It also includes those pieces of shortleaf pine, Cuban pine and loblolly pine which, because of their density and strength, are in every way equal to high-grade longleaf pine, as shown from numerous tests by the United States Forest Service and many other well-known authorities."—*Mississippi Valley Lumberman.*

White Pine Blister Rust.

The Secretary of Agriculture has determined that there exists in Europe, Asia, the Dominion of Canada and New Foundland a dangerous pine disease known as the White Pine Blister Rust, new to and not heretofore widely prevalent or dis-



THREE DISTINCTIVE "CREO-DIPT" HOMES IN ALBANY, N. Y., BY ARCHITECT W. H. VANGUYSLING. EACH HOME HAS A DIFFERENT COMBINATION OF COLORS ON ROOF AND SIDE WALLS. ARCHITECTURAL BEAUTY AND CONTRAST ARE THEREBY SECURED.

Many architects, contractors, builders and realty companies have found that no other building material and no other method of shingling secures such satisfactory results. Owners are not only pleased with colors but are more than satisfied with the saving in painting, staining and repairing.

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30 Colors

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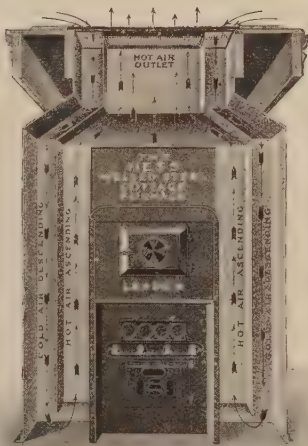
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tributed in the United States and that it may be necessary to forbid the importation into the United States of all species and varieties known to be carriers of this dangerous pine disease.

White pine is too valuable an asset of the country to allow it to be subjected to such devastation as has followed the chestnut, if government intervention can prevent it.

Wood May Become a Food Substitute.

According to London dispatches, German scientists have been carrying on experiments to determine food values not now in use. The experiments show food properties in wood pulp; fat oil and albumen in abundance in the branches of lime trees. The scientist states that "by boiling wood with dilute acids, including organic acids such as lactic acid, a more perfect separation of cellulose parts is induced and the whole mass becomes appetizing and highly nutritious."

* * *

A prominent western shingle manufacturer believes that the secret of making shingle roofs everlasting lies in the liberal use of oil. It will prevent the shingle from rotting the nails and the nails from rotting the shingles, and it is an excellent preservative for the shingles as well.

Woods Suitable for Flooring.

J. W. Y. We would like to get a list of all the woods suitable for flooring where rugs, not carpets, are to be used; and the woods best adapted for wood-work on which wax can be satisfactorily used as a finish, together with a few descriptive points about each of these kinds of woods, whether it is "figured," etc.

Ans. Manufacturers offer end matched, polished hardwood flooring made of four kinds of wood: oak, birch, maple and beech. The two commercial varieties of oak, white oak and red oak, are available. There is considerable variation in the character of either variety, due to the fact that there are many kinds of "white oak" and "red oak."

Oak Floors: Oak is one of the most popular of all woods, either for floors or for finish. It has a very handsome grain especially when quarter sawed. It makes

a very durable as well as a beautiful floor. As it is an open grained wood a filler is used before finishing. White oak is more durable than red oak.

Maple flooring has long been preferred by the building trade for all manner of business structures, such as office buildings, skating rinks, hotels, clubs, schools, churches, libraries, apartment houses, department stores and similar buildings, because of its superior wearing qualities. In late years attention has been given to the decorative value of maple floors for residence use. The wood when properly finished shows considerable variation in color; sufficient to satisfy the most exacting, and develops an attractive golden color.

Birch Floors: The beauty and uses of birch as a finish wood are well known. Birch makes an admirable floor for residence work. The wood takes stain better than almost any other hardwood and is one of the best woods for all interior work. Birch floors may be given almost any color desired.

Beech Floors: Beech is very similar to birch and will take similar treatment.

For the northern portions of the country it would seem that nature had provided these dense, durable woods, giving them attractive light color, to offset the long dreary winter days.

All woods darken or "color" when exposed to the light, even though protected by wax or varnish. Lovers of this will endeavor in every way to conserve the natural beauty of wood employed for floors or trim. For that reason colored fillers and stains should be used sparingly.

Edge-grain on quarter sawed yellow pine and Douglas fir flooring are also used in the same way as hardwood flooring. Cypress is sometimes used, especially for work more or less exposed to the weather. These softer woods are also used for the finish in many of the less expensive houses.

The "figure" in most woods depends on the way the grain is cut, in sawing the lumber. Slash or flat grain lumber generally shows more "figure" but is not suitable for floors, vertical grained floors being less liable to splinter.

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A great many homes are built without an architect's supervision. When this is the case, go out on the job with a copy of this book in your pocket, and you will not only be able to recognize faulty work, but you can give intelligent instructions to the workmen and show them how to do it right.

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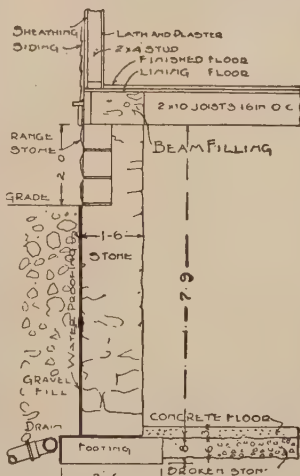
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(Fig. 6)

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SPLINTERS AND SHAVINGS

In Case of Fire.



LITTLE forethought is somewhat like the ounce of prevention, which is so much more valuable than the pound of cure, if it is available at the crucial moment. To the householder who has no near neighbors, the too-common tragedy, if it comes must often be met alone; there is no time for consultation. Here is some advice and warning given by Helen R. Albee in the *House Beautiful* which may help one to prepare for such an emergency.

A Decision on the Instant.

"When a fire is discovered you must decide instantly whether you can fight it successfully or not. Unless you have plenty of help and water at hand, take no chances. If it is under way to any degree do not waste a moment in futile effort, but begin at once to save what you prize most. Remember that flames, even if started in a separate building, spread with incredible rapidity in frame houses, and leap across spaces. This I learned to my bitter cost in a recent fire which started in a detached barn, then swept across a wide space to the main buildings, and swiftly ate its way through a house of eighty foot frontage; in less than two hours not a vestige of my home remained—only a few charred beams and a waste of ashes. Impress this fact upon your mind and be prepared to act instantly."

Close Doors and Windows.

"First of all close every window and all doors between connecting rooms. This is imperative, as it pens up the fire and delays its spread."

Get Tubs, Baskets, Sheets and a Broom.

"Do not fail to gather up tubs, baskets, or other large receptacles which will hold many armloads, and save trips. Be sure to get brooms, for they may be necessary later. Begin to dismantle the room nearest the fire; use force where articles resist; tear them down, take them bodily; When a receptacle is full take it at least

twenty feet from the house and dump the contents on the ground, if possible on sheets spread out to hold them. Chests of drawers and heavy pieces of furniture cannot be moved rapidly; leave them until later; but take out any drawers packed with linen or silver, and carry them out. Fill pillow cases with books and small articles, but not crockery—that should be placed in tubs. (I failed at this point and lost a most valuable collection of old blue china and glassware for want of tubs that had been overlooked.) Bulky things like pillows, blankets and bed linen can be thrown out of windows. If possible drop a mattress over a balcony upon which chairs and small pieces of furniture can be lowered without much injury if held so as to fall straight down. Spread sheets and counterpanes on the floor to receive the contents of drawers and closets; but be sure to tie the corners of sheets together, else the contents will drop out and be left behind, or be strewn on the lawn and burned by falling cinders. Work as long as you can on the upper floors, keeping ever in mind your means of escape. If you find yourself cut off from a staircase, do not lose your head. Tear up sheets or counterpanes, tie the strips together, and fasten to the bed, and lower yourself down from a window. But you should take no such risk. It wastes time that should be used elsewhere.

"As you leave each room be sure to close the door behind you; this precaution may give you fifteen minutes extra time. When working in upper rooms station some one outside to drag away what is thrown out of windows; this saves needless trips up and down stairs. If you take a mirror or a clock, see that it is placed in safety before you leave it.

"Under excitement one does strange things and fails to do the most important; but make a great effort to keep as clear a head as possible; much depends upon your judgment. Do not try to grab at any and everything; estimate quickly relative values; choose necessary things rather

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than costly ones. Clothing and flannels come first; blankets, linen, and bedding next; then silver and money on hand, and certainly medicines if there is an invalid in the home. Put medicines or bottles in a waste basket; otherwise corks may fall out and the contents run over articles near them. Try if possible to keep various parts of things together. One may as well lose an article as to leave some necessary portion behind."

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If you have no such list after a fire "begin one at once as soon as you find shelter, adding every item as you recall your losses. Have it ready when the adjuster comes. Also make a list of salvage, for insurance companies demand both. Do not pack up your goods in boxes or barrels until the adjuster sees what you have saved. If an article is damaged, call his attention to it. My experience was that many things that I thought were in good condition were found on examination to be ruined; for example, two small holes in a velvet coat made a whole suit unavailable. Be perfectly frank and straightforward; it pays. Do not run up the value of goods lost, and cut on things saved. Companies are accustomed to general averages, and can quickly detect inequalities."

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Speaking of splinters, if you get a splinter of wood in your hand always take it out immediately. Some kinds of wood are especially poisonous in some people. California red wood is mentioned as one of these. It is far more economical in the long run for a man to dig out a splinter than to have him favoring a sore hand for four or five days.

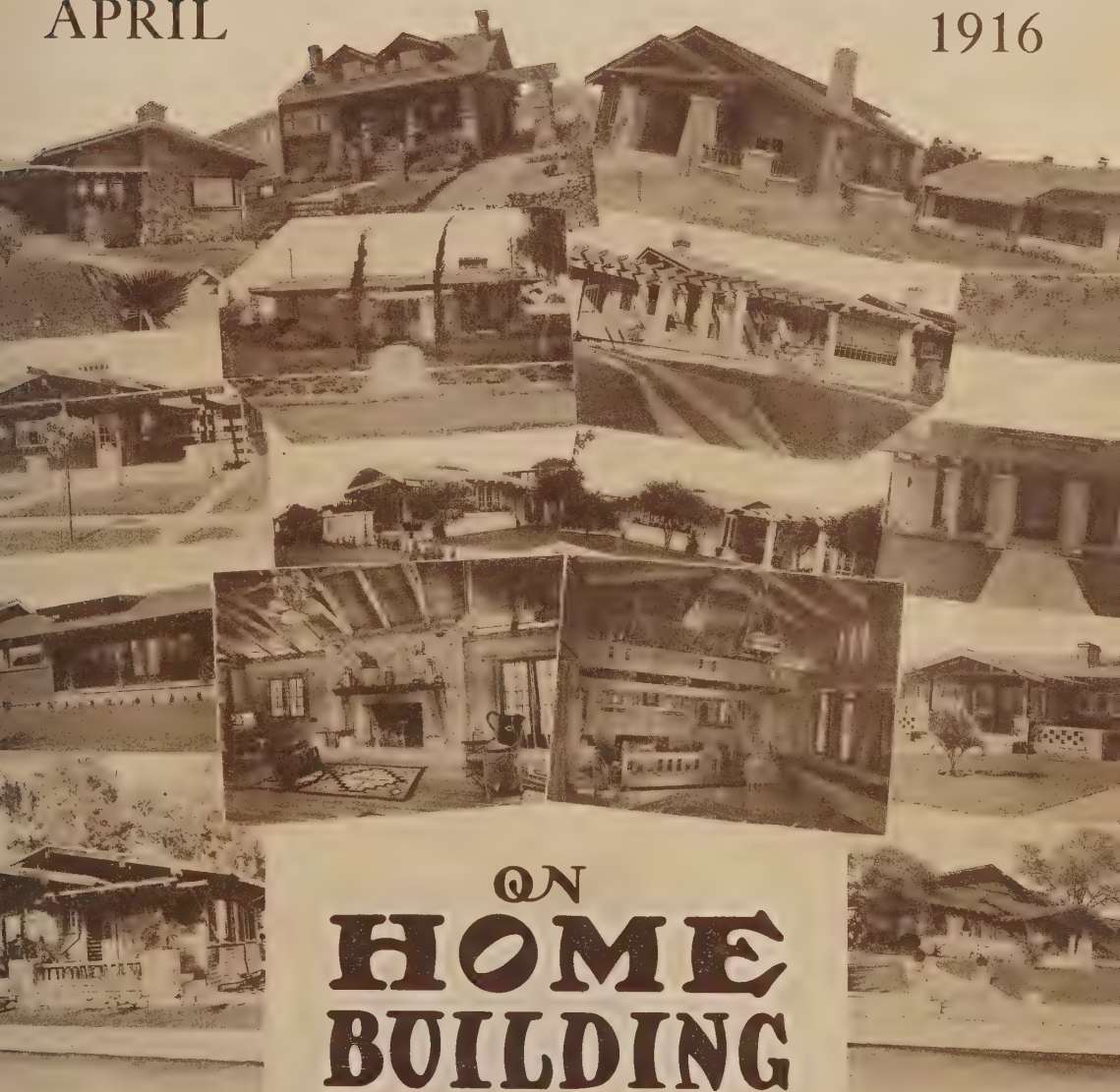
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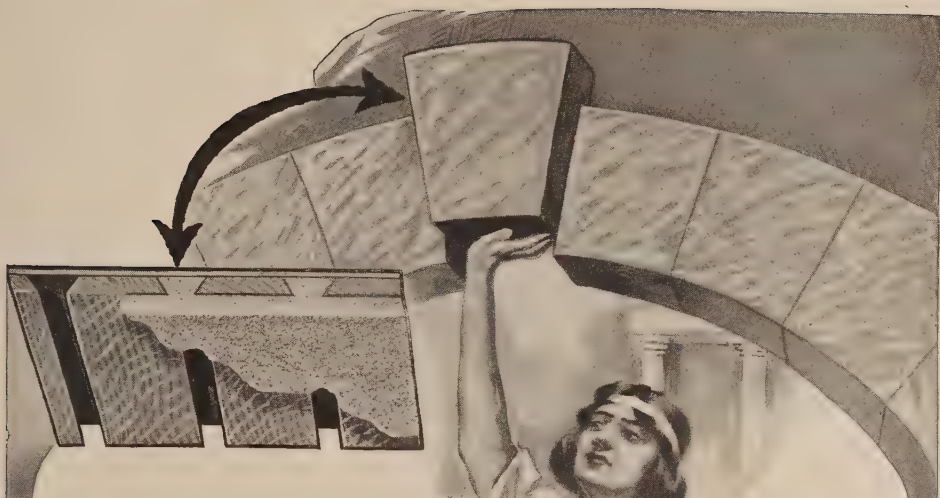
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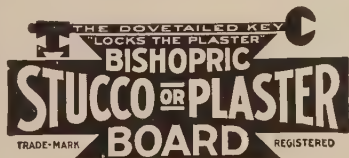
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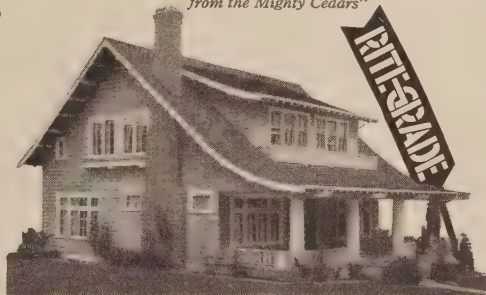
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Just a Word

Economical vs. Cheap Building.



It is a curious fact that the man who will not build a home for himself because he will not build in a cheap way, and "building is so expensive," will yet buy a house which, while it looks well on the outside, has a white kitchen and bathroom, and is perhaps "finished in mahogany," has been very much scrimped in the matter of nails, the floors are not so firmly braced but that the back door rattles when heavy furniture is brought on the front porch, and back plastering or heavy insulation which would reduce the coal bills has not even been attempted. "The house was really a great bargain," "So much cheaper than a man could build for himself," "Built for a home, etc."

This is all true. It is a much cheaper house than a man would build for himself. The householder would have put enough cement into the concrete walls of his basement to make them waterproof. Cement costs money, and the builder could not afford it for he must sell the house as a bargain. The householder would have had the house well constructed, well nailed and thoroughly braced. He would have selected carefully the places in which to economize, and the economies would not have been the same as those of the builder.

The cheap workman is always an expensive man. The skilled man is usually much more economical in the use of materials. He will save more in cutting materials, using them to better advantage for his employer than the excess of his salary over that of the cheap man and at the same time do better work. The better workman makes fewer mistakes with their consequent loss of time and materials. True economy is not always directly connected with dollars and cents.

Does the householder really hope to get something which he does not pay for? Is it another case of the gold brick and the "quick-rich" man? We think not. It is a distrust between the different people who are necessary to the operations of building, and a certain mystery which surrounds advancing prices. The home builder is ready to pay for what he wants in his home, but he cannot see where the money goes, and the figures do not tell him.

More systematic estimates would do much to restore confidence, and a different policy with reference to extras would eliminate some of the fear of building. Lack of confidence tends to kill any business as uncertainty adds to the risks. Co-operation and increased confidence is the key to the situation. If the home builder deals only with those in whom he has confidence, he will be assured of a square deal and a well built home, without paying more than a fair value.

KEITH'S MAGAZINE

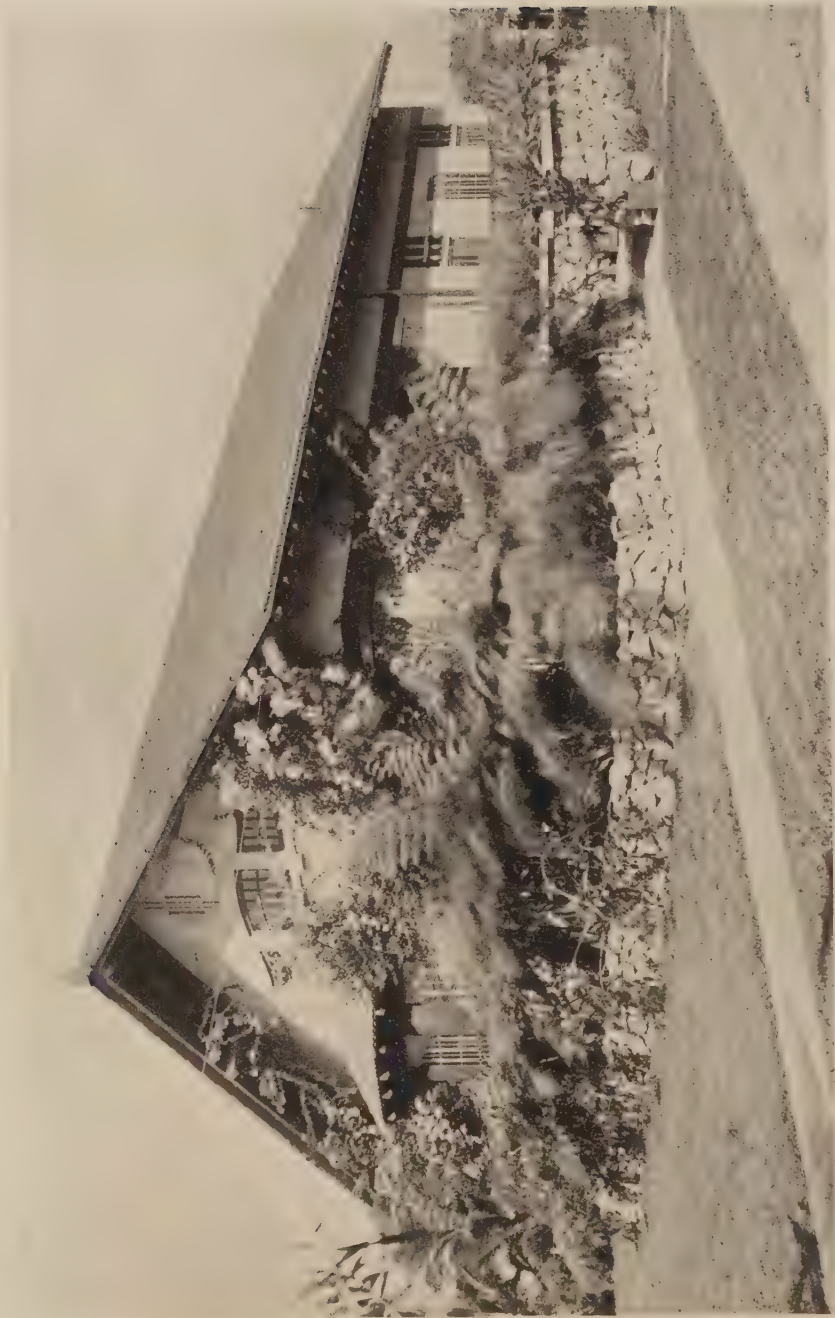
ON HOME BUILDING

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A Porto Rican Bungalow.

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No. 4

Concrete Bungalows in Porto Rico

Earl K. Burton

Those who know something of Spanish architecture and who are familiar with the Spanish building of Mexico and California during the Mission period will be interested in modern work in Porto Rico, dominated as it is by Spanish feeling. Though the work is similar to American treatment, a wider and altogether logical use of tile may be noted. The Spanish architect and the Spanish people have long been familiar with the use and the possibilities of a plastic building material and are accustomed to its use as an architectural material. They take advantage of their peculiar environ-

ment and build small bungalows with a four-inch reinforced wall, which would not be possible with larger houses and in a more strenuous climate. It is also to be noted that they reinforce their footings and ten-inch footing walls.



SINCE the inauguration of reinforced concrete residences of the bungalow type in Porto Rico some five years ago, they have gained much favor among Porto Ricans and American residents of the island. This type, which is exemplified in the accompanying illustrations, is the stand-



Faience tile panels are inserted in the outside walls.



A bungalow at El Condado.

called "raft" foundation. A footing wall 10' thick extends from the footing to the floor line and is offset here to form a belt course around the building on the

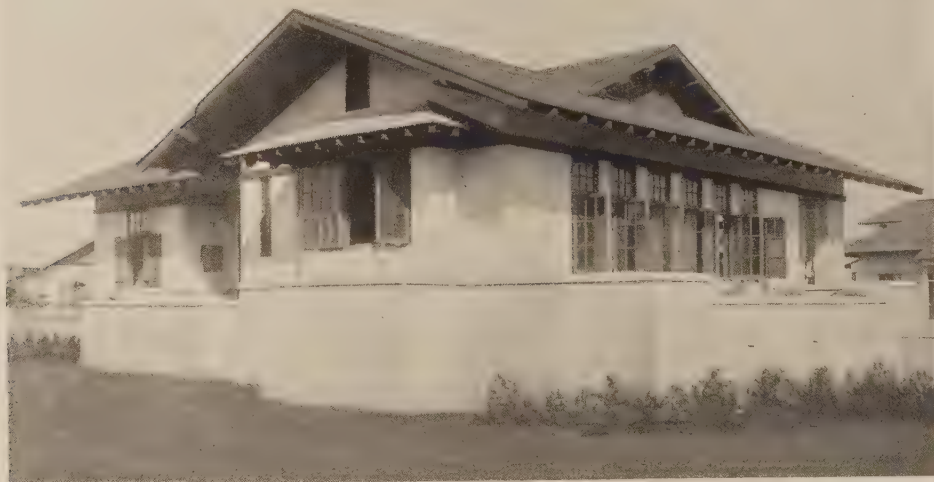
outside and a bearing for the floor joists on the inside. For one-story structures the wall above the floor has been constructed of reinforced concrete 4" thick



The tile inset and a larger house.

or of metal lath and plaster on studs. In the latter, the wall is 6" thick. The footing and footing wall concrete is mixed in the proportions of 1:3:6, using American brands of Portland cement, river sand, if possible, but usually sea sand, and broken stone (a blue trap-rock of excellent quality), ranging in size from $\frac{1}{2}$ " to 1". The footing and footing wall are poured monolithic around the entire building and the former is reinforced with

are the hard trap-rock mentioned above and range in size from $\frac{1}{4}$ " to the smallest particle. This mixture gives a very smooth wall and little additional work is necessary after the removal of the forms. While such a wall is durable, yet its compressive strength is rather low, but experience has shown that it is amply strong to support a roof of ordinary wood construction, the type which is ordinarily used. As an added factor of



The windows are an important factor.

from three to five $\frac{3}{4}$ -in. bars longitudinally and $\frac{1}{2}$ -in. bars transversely, spaced 24 inches. The footing wall is reinforced with $\frac{1}{2}$ -in. bars spaced 12" horizontally and 24" vertically. The 4-in. concrete wall has the same reinforcement as the footing wall. Four inches may appear thin for a wall supporting a roof and it would seem that it would be hard to pour so as to obtain a smooth surface and to eliminate the "honeycombs." The latter objection is overcome by the use of a mixture of Portland cement and screenings mixed 1:5. The screenings

safety, and to prevent cracks that have occasionally appeared in the 4-inch walls, specifications that call for a solid concrete wall have been changed to a 6-in. wall.

The chief advantage of the use of screenings is the pleasing texture of the finished surface.

The concrete is mixed by hand to a wet consistency and the wall is poured in courses 3' high around the entire outside. The forms are removed 24 hours after pouring the concrete and the wall, while still "green," is rubbed down with a wooden float. In this way the rough

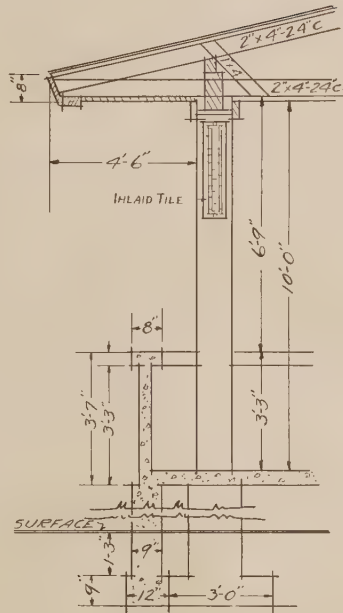
spots are eliminated without discoloring the surface. For such a thin wall special care is exercised in placing and bracing the forms to keep them true and plumb.

Tile floors are laid on a concrete base over well packed earth fill. The floors of the bath room and of the kitchen are generally of tile and concrete respectively. The top surface of all concrete floors is treated with a hardener to prevent wearing and dusting.

All interior partitions are constructed of a metal ribbed wire mesh, plastered both sides, except where a center support is necessary for the roof joists, in which case the center longitudinal wall is of solid concrete. The partitions are 3" thick and are laid directly upon the wood floor, the floor joists being doubled under the partition. They are reinforced at the corners and at the sides and the top of door openings with 1½-in. structural channels vertically, and ¼-in. round rods, attached to the ribbed wire mesh, horizontally. The mortar applied to these partitions consists of 1 part of Portland cement, 3 parts of sand and a small

amount of lime, usually 10 per cent of the cement. Interior walls are plastered.

All concrete and plaster are waterproofed with an integral waterproofing, as well as all concrete floors that are laid on the ground.



The modern reinforced concrete dwelling is in marked contrast to the older type.

The roofing material used depends upon the fancy of the owner and is of asphaltic paper, metal tile, Spanish clay or vitrified tile.

The tendency of the Porto Rican is toward rather bright colors, and panels of faience tile are inserted in certain parts of the outside wall, usually on the sides of columns and at the lower corners of

is no sewerage system. Sanitation, therefore, requires that each residence must dispose of its sewage. The system consists of two tanks placed well under ground, one of them constructed of concrete and practically air-tight. The second tank is constructed of loose stones through which the sewage water percolates. The solids are retained in the first



The composition of the concrete gives a pleasing texture to the finished surface.

windows. The windows are a very important factor in these dwellings, as it is imperative to obtain the maximum ventilation and, on the other hand, not admit too much sunlight. As before mentioned, this is ordinarily accomplished by the use of shutter windows. These windows are also generally placed in groups so that when they are open the room will practically be converted into a veranda.

These residences contain nearly all of the conveniences of a modern suburban American home, such as water service, electricity, gas, etc. However, except in the business district of San Juan, there

tank and the fluid is drained into the second, where it seeps out through the ground. The air-tight tank will require cleaning about once a year and the outlet tank, if constructed properly, will never require any attention.

These dwellings were designed by Mr. Antonin Nechodoma, architect, of San Juan.

The accompanying illustrations and the description of the work by Mr. Burton, resident engineer in San Juan, Porto Rico, are given through the courtesy of Concrete Cement Age. They show the Porto Rican Bungalow, and how it differs from its American prototype.

“Rain-on-the-Roof”

A Summer Bungalow

Marion Alice Parker



AVE you ever lain under the flat roof of a summer cottage and heard the rain of a summer shower descend like a torrent just over your head; then as the storm passed on heard the pitter-patter, pitter-patter of the rain drops and finally, like the refrain of a lullaby, the tinkle, tinkle of one drop after another as they fell into the rain barrel?

That was how the name, Rain-on-the-Roof came to the cottage.

It started out by being a “shack” on a little oasis made by a knoll of oak trees, surrounded on two sides by swampy land. It was far within the city limits of the growing western city, but the swamp kept the streets from being “cut thru,”

so the neighbors stayed on the other side of the swamp and after you had wound your way over the little woodsy path to reach the place you felt far from the maddening city throng.

At first it was a big room with a screened porch in front and with tar paper and warm fires it sheltered through a winter or two the young couple who were dreaming of and gradually bringing to reality the real house next door. When that was finally ready to be occupied the “shack” was deserted and then came the tired business woman who saw in it such a fine place to rest and withal such an easy place to reach after the rush and worry of a busy summer's day work. Then it was that the shack became trans-



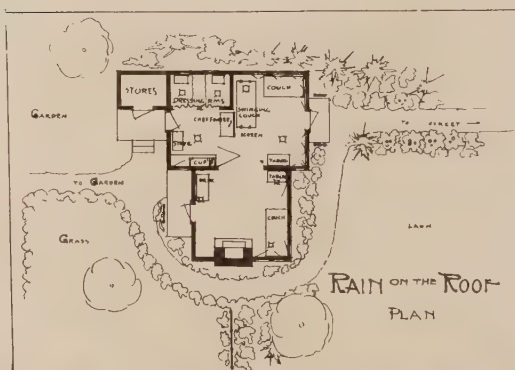
“Rain-on-the-Roof.”

formed, another room with a fire-place made it roomier and provided for a bit of heat on early fall mornings or rainy summer evenings.

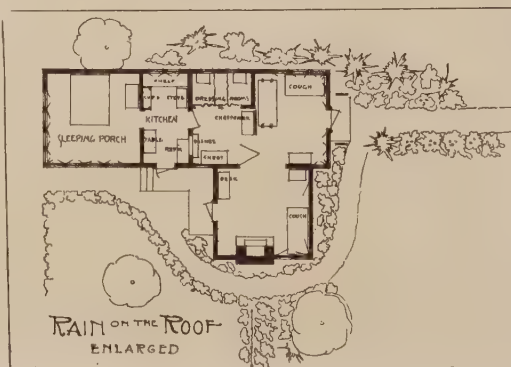
The screened porch was fitted with casement windows, a hanging couch was placed, books tucked on shelves where they could be put, a few of the treasures of the city home put on a mantel shelf and writing desk, and one could settle down.

The two rooms were parlor, porch, dining room, kitchen and sleeping rooms. The big double door, when it was turned back, made a screen for the kitchen corner, three feet of board partition and some curtains with the judicious placing of a chiffonier make a roomy dressing room and hanging space.

A little triangular space where the two roofs joined made an attic which really could store many things.



A walk bordered with blooming things.



The bedding was in the chest under the hanging couch and you do not need many dishes if you plan to live simply.

As time went on the demand for entertaining was so constant—for if you came to the

place once the charm was sure to lure you again—that another roomy sleeping porch was added and the lean-to shed turned into a roomier kitchen and now the place could take care of four or five persons easily. Unless you have tried it you can not imagine how tightly, yet how conveniently, you can live in such a place.

It was such a low squatty little house and the roof so low

that if you were a very tall person you ducked your head or took off your hat when you entered the doorway. But within, the roof boards were the ceiling and the slope was just enough to be pleasing within

and useful without. Tar paper made a serviceable roof.

It had its own individuality—this little house—as every house as well as every person should.

One of its charms was being able to see how it was put together, for it was all of wood and simple in its construction. The studs were set flatwise with the boards outside and the panels made by the window panes, fireplace, and corners given a finished look by a square moulding run around in each panel. Then all, roof, floor and walls, were stained a warm red-brown and the outside as well.

The big double door was just a wide batten door of (3½) three and one-half inch stuff and in the outside doors the screen of the panel could have a glass frame buttoned behind it, but in summer weather a curtain was enough.

The curtains were not made to fit each window though in several parts, but were made with wide hems with a wire the full length of the window openings run through at top and bottom. One window or all could thus be shielded. The making of these curtains is a story in itself for can you see the triangles and circles and squares that were put on any old place? They are



A shelf for books over the fireplace.

just scraps of bright colored silk which relieve the monotony of life and of these intense blue curtains in particular. The couch covers are common white bedspreads also dyed this same intense blue, which color also you find in the larkspur growing by the path to the door.

The book shelves, the china shelves, and the kitchen shelves are all part of an old plain book-case which was cut up both horizontally

and vertically and then placed right side up or upside down as the case might demand. The china shelves were placed in the wall so that they were available from the kitchen side or the other room side if the meals were served in there. One of the charms of the place was that



The sleeping porch.

if it was cool you ate in front of the fireplace, if warm where you saw the flowers nodding at you through open doors, or if you were quite lazy, on the kitchen table.

Electric contrivances made easy house-keeping and an electric wire can follow you across a swamp even if a water main can not. But if you have your house low to the ground and then depend on a rain barrel for a large amount of your water, it only brings you closer to nature, as the lady says.

And though the little nest is charming in itself, a haven to the weary in its peace and quietness, its real every-day-in-

the-summer interest is the garden and the growing things all about.

If you own your own front door you can have a walk up to it bordered with blooming things for every month of the summer and a small patch of earth can supply you with fresh lettuce for your salad and other vegetables which are never so good as when just picked. Then if you border your garden plot with sweet smelling flowers you can open your casement windows in a little low house like this and let the wind waft in to you sweet smells which make you enjoy warm summer days as well as summer showers in Rain-on-the-Roof.

The Bungalow Fireplace

Anthony Woodruff



THE cheer of the open fire is a pleasure in itself. The

The soft crackle of burning logs appeals to a primitive instinct and gives forth a pervading sense of pleasure and of comfort. So strong is this sense, even in our furnace heated civilization, that no house is quite complete, the installed heating plant notwithstanding, unless there are one or two fireplaces in the house. In the cool days of spring and autumn we crave the cheer as well as the warmth of the open fire, even if it is supplied by a gas log.

With the bungalow, perhaps more than in other types of homes, the fireplace is



Fireplace with a balcony overlooking it.

instinctively made the key to the interior treatment. Its generous breadth of chimney breast sets the scale, whose simple treatment requires an equal simplicity in other details of the room. The materials used in the fireplace fix the color scheme for the finishing and furnishing of the room.

A chief merit of the bungalow, and one which is an underlying element of its popularity, is its simplicity. In the early stages of its development this simplicity was often exaggerated into a crudeness not in keeping with other general conditions, but which made it especially adaptable to summer lodges, hunt-

ing camps and lake and seaside life. Later development allows the greatest refinement in the details. It is not uncommon to find the bungalow with Colonial details, not only for the exterior but for the interior finish of the rooms.

In the first illustration shown the living room extends up under the rafters, with a balcony which arouses one's interest. The plaster of the chimney breast relieves the dark finish of the woodwork, with a touch of color in the brick around the fireplace opening, which is outlined by a simple moulding. The chimney breast carries the lines of the flue as it is drawn to the center, while the heavy wood shelf is in keeping with the other woodwork of the room.

"At Journey's End" is also ceiled by the rafter boards, with exposed roof trusses. The fire place is built of native boulders, with a metal hood. Boulders have great possibilities in the way of color, and the varying form and size often gives an irregularity which is very pleasing in effect, especially for the less formal types of building. For that reason a boulder fireplace is so often found in a bungalow.



"At Journey's End."

Split boulders give charming color effects and variety in the shape and size of the stone while giving a flush surface to the chimney breast, which adapts itself to the more usual interior finish.

The brick fireplace is always popular as it lends itself to all sorts of conditions. The variety of surface and of color is practically inexhaustible. It is a material which is always easy to obtain and convenient to handle, yet is adaptable to practically any form of design. The brick fireplace here shown is of the simplest type. It has ample shelf room and is in keeping with the open construction of the interior, but would



The brick fireplace is always popular.

be equally in keeping with a plastered finish, especially if one wished the deep shelf space; otherwise the wide chimney breast could be carried to the ceiling.

The Colonial fireplace finds admirers everywhere and it has become quite at home in the bungalow, taking with it the simple white treatment used so generally in the early days. The white fireplace here shown is very restful and attractive. It seems to carry one back to childish visits to "grandfather's" at Christmas or Thanksgiving time. The simple lines of the mouldings relieve the severity of the design.

Have you ever longed for an outdoor fireplace, where as the leaves begin to



An outdoor fireplace.

color in the autumn and the air carries the thought of frost you can sit out in nature's great art gallery and, in comfort, feast your eyes on the panorama? Or in the first warm days of spring when everything is aglow with life? Or in the exhilarating chill of frost and snow? The outdoor fireplace can give this to you. It would be charming with a rustic pergola and vines about it, giving a little protection from sun and wind. For the veranda of the summer

resort which is open late and early, or even for the city roof garden it is unique.

When people get to the "shut in day" nothing stays with them more persistently than such a reminiscence.



A white fireplace.

The Adaptability of the Bungalow

Kate Randall



THE small house, whether we call it a bungalow, or simply a cottage, is always in demand and any new ideas always welcome. For the young housekeeper, who has no maid, for an old couple, or for ladies alone, these small houses are ideal.

of house could be so adaptable. The houses illustrated are among the newest examples of these popular homes.

The first bungalow shown is particularly attractive in the quaint Japanese swing of its roof and the good stone work.

The rough siding is stained a dark



The Japanese swing of the roof.

They are exceedingly deceptive, and though seemingly small, they may spread and spread around a green court; have doors of glass and windows so wide, that one practically lives in his garden, and sleeps with the birds. If one has had a long dream of jasmine and orange trees, in a garden of roses, about the home he hoped to have, or if one thinks more of firs and pines and big fires, a bungalow exactly fitted for the place can be furnished at once. Certainly no other style

green with white trimmings. The interior is very simple, the living and dining rooms are furnished alike—as they open together—in a soft leather brown, the woodwork with an oil stain and the rough plaster, above the plate rail, is tinted, but below the rail burlap is used, the natural shade being tinted at the same time as the walls. The fireplace, like the chimney, is of boulders, with a high shelf of wood. Gay chintz hangings make these rooms very home-like.



One of the newer bungalows.

The woodwork in all the other rooms is white, the walls of kitchen and bath painted a light blue, and the bedrooms papered with pretty flowered papers. One wall of the rear bedroom is almost entirely of glass. A large glass door and wide windows open on a charming little garden.

In the second bungalow the shingled siding is simply oiled. The chimney, all on the exterior, is plastered. Inside it is flush with the walls and is finished in dull green tiles about eight inches square and the wide hearth is of the same tiles. The woodwork is as flat as possible and in the living and dining rooms is stained chestnut, with a trace of green rub-

bed in, this tint of green appearing again in the draperies and wall paper. The kitchen and bath are tiled to the height of five feet. The kitchen range stands back in a little alcove. Over it a hood is built which carries off all the fumes of

the cooking. Across the whole end of the bathroom there is a bay about two feet deep. This is filled with a toilet table, with drawers to the floor. The wall at the back is half filled with a mirror and casement windows on each side, and again at right angles to these windows are small ones, the depth of the bay. The effect is very good. The same "little bay" idea is used in the china closet for drawers and bins and again



The slope of the hillside.

in the dining room for the built-in side-board.

The peculiar sloping lot on which the third bungalow is built, makes it almost the most attractive of all. The steep hillside has been very cleverly utilized, and the bedrooms, which are really on the first floor, are practically second story

bination of bungalow, drives and hillside and trees is quite charming.

The last photograph shows the side view of a similar bungalow.

There is a door from the kitchen on to the large side porch, which is used, in summer, as a living room and for informal summer gatherings, and the door is



Almost a bungalow type.

rooms, a great comfort to timid people.

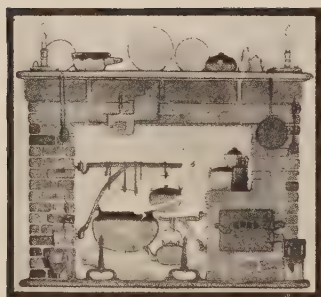
A drive winds down the hill one each side of the house, and the high basement is utilized as a garage. Above this is a wonderfully airy living porch, and still higher, above this porch, there is a sleeping porch, among the very tops of the hillside trees. A small dressing room connects with this sleeping porch, the only room on the second floor. The com-

a great convenience in serving. The whole interior is a scheme in gray, silvery tinted woodwork, and gray papers, only the gay chintzes giving color and life to the different rooms. One is a tangle of wild roses, while another has wistaria flowers and strange purple birds. The living room is more subdued, the draperies being of East India cottons in dull shades of red and blue.

Holes in the Lawn.

Fill in the holes in the lawn in April with good mellow loam if you want it to appear well in the summer. Then seed it over as you would for a new lawn. Scratch the entire surface of the grass with a sharp steel rake and scatter seed lightly if the grass is sparse. Top dress with a suitable fertilizer.

Immediately after sowing the seed roll the entire lawn with a heavy roller. Go over the ground just once. After this the lawn should be gone over about twice a week. If there are any plantains, dandelions or daisies in the plot, dig them out now.—*F. H. Sweet.*



THE KITCHEN



The Bungalow Kitchen with a Breakfast Alcove

Edith M. Jones

(Copyright, 1916, by Edith M. Jones)



HE bungalow has come to fill a long felt need. Its compactness makes an especial appeal to the busy housekeeper.

Modern conveniences and a call for greater simplicity along other lines have indeed done much to lessen the work in the home. We all know it requires a well-rounded system to keep up every part of a well-kept home—but women are learning that house-keeping, like every other line of business, yields returns in proportion to its systematic management. It has not been the work itself so much as the ceaseless useless, unrelated, time-absorbing

activities which have shut women up in their homes and made house work seem so hard and monotonous. But at last the modern watchword "efficiency" has invaded home architecture and the compact bungalow type has come to eliminate their many useless steps. The progress-

ive women of to-day are finding there is a way to carry on the home and have outside interests as well.

As the main part of the household tasks have to be performed in the kitchen, it is obvious that every daily step saved in this part of the home saves untold energy through a lifetime of occupation in domestic duty.



A cozy alcove off the kitchen.

The English custom of a breakfast room has always been an attractive one. This informal morning meal seems far more comfortable in the snugness and warmth of a small room rather than the formal dining room of greater pretension. The bungalow, however, rarely affords enough space for this extra room but this cozy, sunny, little alcove off the kitchen has come in its place. The "breakfast nook" is just the thing to save steps and at the same time insure prompt service in the usual morning hustle.

I have always been very much opposed to the careless serving of any meal. I think nothing is more destructive to the table manners and conversation of the family than a meal served on the kitchen table with all the confusion and odors of the preparation of the meal. But this alcove with the table and seats planned for the purpose is quite different. The breakfasts now-a-days are so simple that little service seems necessary to so informal a meal. In many homes the occupations and school hours of the several members of the family make it necessary to serve the morning meal at different times. This can be done with far greater ease and much less waste of the housekeeper's time if some arrangement of this sort can be provided in the kitchen. Between waits for instance, the dessert or the vegetables for the next meal can be prepared or some of the many other things which absorb this precious morning hour can be accomplished at this time.

The "breakfast nook" shown in the photograph is unusually attractive as it looks out on a bit of garden and has the morning sunshine. It is 6 feet by 4 feet inside measurements. It has a radiator

under the table to insure a comfortable warmth. The table is 4 feet by 3 feet 6 inches, and this table overhangs the seats on either side $4\frac{1}{2}$ inches. The seats are each 19 inches from the floor and $17\frac{1}{2}$ inches wide.

There are many things which could be



A breakfast nook.

added to this already charming little corner. For instance; a floor connection for the electric toaster is a great convenience—for every one who likes hot, crispy toast enjoys making it on a toaster at the table "while you wait."

A small cupboard for the breakfast dishes and drawers for the silver, doilies and napkins—in close relation to the al-

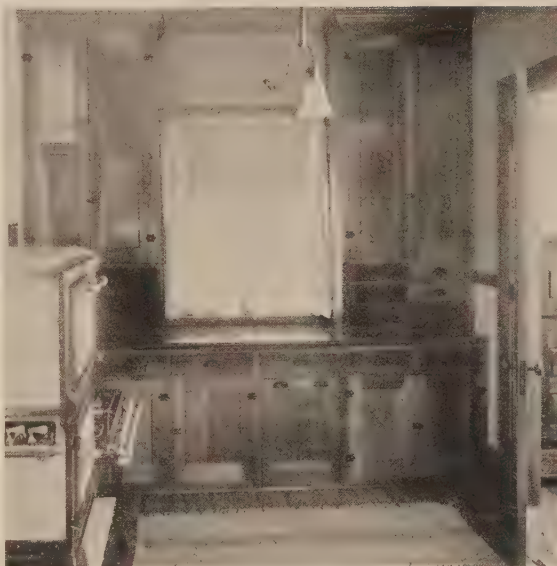
cove and sink—would save many, many steps.

Another little cupboard could be added to this alcove for the cook books and account books. And a filing cabinet for necessary papers, bills, etc., would make the checking up of monthly statements less irksome and more accurate. The housewife who has had some business training can often best appreciate the advantages of the systematic order and business principles applied to housekeeping. But all housekeepers would find their work more interesting if they thought more seriously of the business they were engaged in and made less of the so-called drudgery.

A radiator with a warming closet could be used to advantage in the kitchen for the late breakfast arrival. It could be placed near the table so that foods could be served from it without loss of time or temperature.

There are several types of radiators on the market which have warm compartments embodied in the radiator itself. These have metal cupboards with shelves set in the center of the upper half of the radiator, with several sections of the radiator on either side of the cupboard which are the full cupboard height. Metal doors close the cupboard tightly so that food may be dished ready for the table and kept hot in this cupboard until ready to serve. This closed metal compartment, with heat applied to three sides, will keep food hot for a considerable length of time, especially if served in hot dishes.

Radiators of this description, by the way, were originally designed for use in the dining room but the newer scheme is to place them in the butler's pantry, in case there is one. The compartment is thor-



One end of the kitchen.

oughly useful, occupying as it does about half the cubic space of the entire radiator. There are shelves inside, so that foods, plates, etc., can be kept warm at the same time. Another decided advantage of this useful addition to the pantry is a marble shelf which may be placed over the top of the radiator. This can be quite broad, and as marble retains the heat it serves as a most convenient resting place for dishes that must be kept hot after they are taken from kitchen.

There is something magical in the way work of any kind begins to yield pleasure as system, organization and personal interest take the place of confusion and indifference. And how true it is when we put the same enthusiasm into home-making and the same amount of study and preparation into mastering its difficulties, that other professions require,—housekeepers become masters of their work and the sense of drudgery is lost in the great aim and art of the work which so closely affects the lives and welfare of the whole race.

The Bungalow Dining Room

Charles Alma Byers

EVEN in the small home, the dining room should be made one of the most attractive features of the house's interior. Such is usually the case with the bungalow home, with the special attention given to details. The dining room should be well lighted by windows, tastily finished and attractively furnished, so that it may be cheery, comfortable and inviting. In the belief that the housewife is always looking for new ideas which may help her in this direction, we are here showing photographs of several different kinds of dining room arrangements which have proven particularly satisfactory to their owners.

Since the well planned dining room should receive considerable natural light, the matter of windows perhaps should have first consideration. A row of three or more windows in one outside wall always constitutes a very satisfactory arrangement, although, if the plan will permit, windows on two sides will be found even more desirable. A flood of morning sunlight will cause the room to be the more cheerful for the morning meal, and therefore this matter must be considered at the time of building. In many cases it is discovered too late that the dining room has been so

placed as to always remain dark and gloomy, whereas this room should be, by all means, invariably light and cheery.

Individual taste will, naturally, largely govern the selection of electric lighting fixtures for the room. It might be well, however, to here remind the householder



The buffet is built into a niche.

that these fixtures should be chosen with the view to aiding in the carrying out of the particular decorative scheme employed, for it is possible, through this medium, to either spoil or greatly enhance the room's general effect. For instance, if the fixture possess colored art glass, the colors of this glass should, at least to a degree, blend in with the predominating colors of the decorating. The indirect lighting type of fixtures, or inverted dome, is much favored for the dining room, and the accompanying



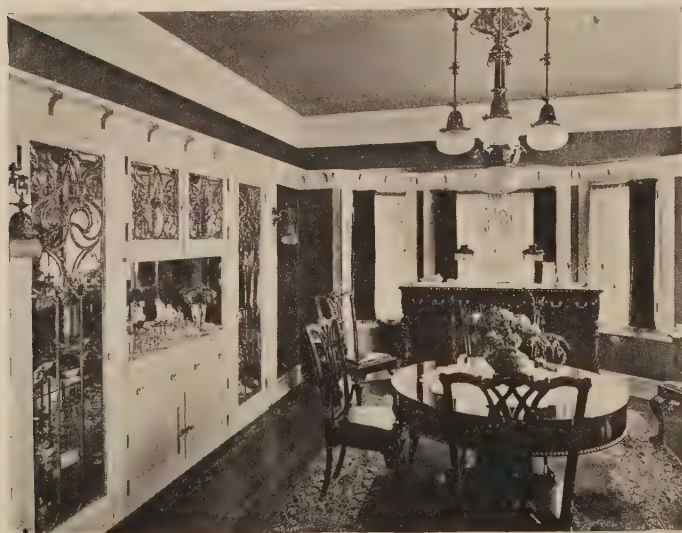
The buffet is charming with its well designed glass.

photographs show a very attractive design for indirect lighting, as well as a number of various kinds of the more common direct lighting type.

The dining room of the small home of today is quite commonly equipped with the so-called built-in buffet, which also

backs the counter-shelf, and the cupboards will probably possess glass doors, of either plain or art type. The illustrations should be carefully studied in this connection, for they show a number of very attractive features of this kind. Being naturally a part of the room, the

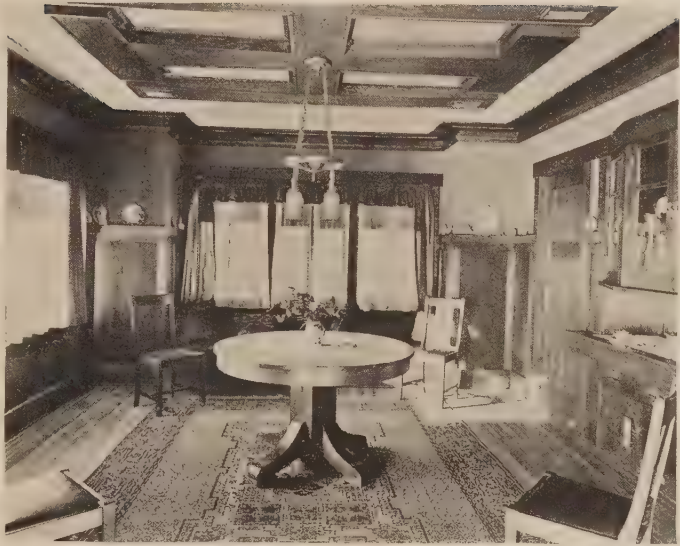
built-in buffet will always correspond with the other woodwork, an important point in its favor, and when built with its face flush with the wall, as is commonly done, it does not obtrude, to interfere with the general contour of the room. Size and conveniences considered, the built-in buffet is considerably cheaper than the ordinary purchasable cupboard and sideboard arrangement, and



A white dining room.

will also invariably help create a more attractive interior, especially for the small room.

A window seat often constitutes a very desirable dining room accessory. Three of the illustrations may be referred to as showing seats, either cushioned or with other treatment. Where one wall of the room contains two, three or more windows, a seat of this kind may be made to extend the full width of such wall, and not only will it prove very convenient but also invariably adds to the appearance of the room. Even if it is not used as a seat at all, it will be found to afford a particularly delightful bench for potted plants, for it will enable these plants to be placed in the sunlight, where they will form a very enhancing decoration. A box seat of this kind is frequently constructed with its top hinged so that it may act as a cover to the receptacle which is naturally provided underneath. This long box-like arrangement will prove most convenient as a place in which to keep the table linen or the space under the seat may be filled with linen drawers.



A dining room with well-grouped windows.

In the matter of furnishing, in order to produce the most satisfactory effect, the table and chairs should be selected to harmonize with the woodwork of the room. Of course, where the woodwork is enameled, the furniture may be chosen to afford contrast, mahogany in such



Old gold brick is used in the buffet.

cases being especially suitable. Wicker furniture is always delightful for the dining room, and it may be used entirely without regard to the finish of the room as it harmonizes with any woodwork. It is peculiarly adaptable and may be used with almost any interior scheme.



Somewhat heavy in treatment.

The first illustration shows a long, deep window seat on which potted plants as well as pillows are placed, under the casement windows. The buffet is built into a niche in the wall, and has glass doors in the cupboards under the serving shelf. It has a long beveled mirror back of the counter shelf. Another illustration portrays a dining room so designed that an outside window is a feature of the buffet. It will be observed that the buffet is constructed largely of old-gold brick, making it especially distinctive.

The second illustration shows a dining room with both a buffet and a long, cushioned window seat. The buffet is

unusually attractive, though very simple in design, and very effective. The design of the glass is of particular interest. It is very nicely worked out and gives a charming effect, with the long lines emphasized in the side cupboards, and the design carried through the upper cup-

board doors. The woodwork of the room is oak finished like old Flemish work. The lighting fixture is an inverted dome of artistic pattern, of the semi-indirect type.

Another photograph shows a room in which the woodwork is enameled white, and the buffet, with its beveled glass doors, occupies the larger part of one of the side walls. The tall china closets at either side of the counter-shaft make a charming display of the china and cut-glass, and back of the shelf is set a long mirror, which produces delightful reflections. At each end of the buffet is a wall light, of artistic design, and the center lighting fixture is composed of five globes of similar pattern.

The walls of the room are covered with a glass cloth effect, of mahogany hue, which matches the side window drapes in color, and the furniture is of mahogany. A plate rail extends entirely around the room.

Another illustration shows charming window groups, with a recessed window seat under one group. The buffet, which is only partly shown in the photograph, has an interesting treatment.

The last illustration shows an unusual buffet with a very heavy and somewhat elaborate treatment. As a suggestion it may be of especial interest.

Soil Tilth for the Bungalow Garden

M. Roberts Conover

LOOK over the garden's surface before the sun is high on some spring morning when there has been no recent rain. Notice the difference in the spaces firmed down over the seeded parts and those between rows where the soil is loose. The firm soil appears wet; the loose soil, dry. This is because the moisture from below gets up to the very surface where there is no layer of loose soil to prevent it. When once the earth particles have settled together in this way they lift water to the dried particles above and the soil does not so readily receive the moisture; neither does it receive as much of the water during a pelt-ing rain as it would if the surface were mellow. This will result in the root zone having but a limited amount of moisture in dry weather.

The great essential is to have the soil mellow in the beginning; that is, to have it plowed to a good depth. The gardener's problem is to keep it mellow throughout the season.

Tight, hard,

compact soil means tough vegetables, slow of growth and poor in yield.

The farmer often suffers severely from dry weather, but in the two gardens where each depends upon tilth only—using no artificial irrigation and having the same soil texture, the vegetables in the cultivated open field will endure a dry spell longer than those in the hand-worked garden. Now, why is this? Just because the farmer works his soil to a greater depth. The cultivator he uses goes a little deeper than the average garden tool which is safe, considering that his rows are farther apart and the tool

does not disturb the roots. But it is this wide, cultivated strip between rows that saves his crops.

If the gardener begins with very shallow cultivation and continues it throughout the season, he will find that the packed soil which he does not disturb will encroach upon his worked surface, for as the mulch of loose soil becomes lighter through evaporation it is very easy to be



Space between the rows.

deceived as to its real depth. This is especially true where a hoe is used. A light scurfing of the soil or a drawing of loose earth is all that can be done right around the plants, but between rows, the work should go deeper so as to break apart the harder layer beneath.

Plants will much better stand dry weather if the rows are not too close. There is less root competition and there is room for more thorough soil working.

In a dry situation the rows should be thirty inches apart. Cultivation with the average horse cultivator under average conditions is from $2\frac{1}{2}$ to 3 inches deep. In the average garden it may not go



In a dry situation rows should be wide apart

deeper than $1\frac{1}{2}$ inches unless special pains is taken to see that it does.

In the first photo the soil is so soft and spongy from deep working that it sinks beneath the tread.

Notice the ample space between rows in this garden located on a slope.

For want of space these beans shown were planted in close rows less than 24 inches apart. They were promising until the weather became dry. Several rows

were planted wider apart and these were able to withstand the dry weather much better. The two outer rows most plainly seen in the picture were planted farther apart and gave a better yield. The gardner may well take advantage of these conditions for both the yield and quality.



The outer rows gave a better yield.

Building a Bungalow

A. R. Rollins



At some time in his life, every one carries in his mind the ideal little home he hopes to build—some day.

The man of great wealth longs for the simple home life with its freedom from responsibilities and cares, and the man of small means—who finds it hard to

At such times we could see no beauty in the straight up and down lines of the old house, with its tall and narrow windows, the small panes of glass all of the same pattern; neither did we like the windows arranged at even distances from the outside instead of being arranged for the convenience of the inside. In the house



Our bungalow.

breast the current of life—thinks of the little home of his own he would like to build for the dear ones.

With the writer it was the novelty of a brand new house. We, of the present generation, had no remembrance of other than the old colonial homestead, neither had the mother. And while the associations of such a home become part of the life of a family, yet there were times when all had longed for a house with all the beautiful and attractive modern features.

were high, grim-looking mantels, and the walls had long since been given over to the paper-hanger to show off the changing styles of wall paper in as arbitrary a manner as any fashion in dress. Even the white china door-knobs did not particularly appeal to us. We felt a lack of coziness, too, in the big, square rooms, the long, narrow halls with high stretches of walls impossible to reach without a ladder.

Coming to Southern California we were



A place for china.

at once charmed with the many cozy bungalows we saw. It was not long before we met, casually, a real estate man. (You always meet real estate men, casually, here.) From the result of the meeting it was evident we had been exposed and were in fact already in the first stages of a malady peculiar to this part of the country and known as "the bungalow fever."

In the first stage of the disease you are possessed with the idea of buying a lot. You do not go about purchasing that lot in a quiet, unhurried, calculating manner, oh, no! You race madly over the city in the real estate man's auto (they all have autos irrespective of the fact that their office may consist of only a desk in some big office) to see divers lots before some one else finds out they are for sale. For think what a calamity it would

be if all the lots were sold before you had a chance to get one!

The second stage you are in the throes of the disease and straightway you talk, dream and see nothing but bungalows. Here the symptoms are easily discernible, once you have passed through them yourself. People who have the disease look and act as if they had found the most engrossing and the most interesting thing in the world. With a faraway look in their eyes they gaze at you in a commiserating sort of way. It is useless to try to talk to them about anything else, for every other thing in the world is a closed book. The fascination of

planning overwhelms them. They arrange and rearrange rooms, consider the turn of an alcove, or the lighting of a room with the view considered, plan nooks, corners and built-in conveniences until the architect calls a halt. He has reached a limit in patience.

So did we plan; we inspected many bungalows; held consultations as to sizes of rooms; studied color schemes and woods and their grains; looked at lighting fixtures and hardware—all delightful to us because new experiences.



A big living room.

Then began the actual planning of the bungalow. The Presiding Genius had said we younger people could plan it as we pleased, the only thing she asked was closets having vents or small outside windows where practical, so they might be well ventilated. Big Brother wanted a light and quiet place to shave. The Artist wanted a bedroom to be decorated with cretonnes and arranged like some of the pictures of girl's rooms in the magazines. The Impatient One wanted a big living room through which she could walk without hitting against furniture, for she was never known to have time enough to walk slowly or carefully. She also wanted a wainscoting all the way around the living room and dining room, so she could have a place for the china and bric-a-brac that had been collecting so long.

A plan was finally drawn that embodied nearly all we wanted, though not all,—the pocket-book called a halt. We wondered if any one ever did get all they would like to have had in building a house.

A large, airy living room, a fireplace in one end, with plenty of book shelves, and the casement windows which we had always wanted, came first. The dining room was in the southeast corner to get the early morning sunshine. The kitchen was our special pride and was to be light and airy, facing the south, with a convenient screen porch adjoining. The bedrooms were arranged for convenience and there was a sleeping porch for those who wished to sleep out of doors.

Our lot faced the east and on it were twelve orange trees. When it came time to prepare the lot and stake out the house, we stayed away altogether for we did not want to see those trees cut down; we knew it must be but preferred to stay away until the sacrifice was complete.

We watched the building with great pleasure. Even the bright, fresh smelling lumber had an attraction for us. Then it was such fun to see the rooms and the different little built-in parts fashioned. We found our eye for size sadly untaught, they looked so different from the plan.

At last it was finished, even to the final polishing of the floor. Then came the problem. How were we to move in and get everything set to rights without mar-



Wainscoted rooms.

ring the floors or scratching the woodwork or walls? It was all so beautifully fresh and clean, and new, that we felt it would be desecrating for even a scratch to appear. We recognized, however, that we were unduly sensitive, and that to the movers it was probably just an everyday occurrence. Our feeling must have communicated itself to the men, for they seemed unusually careful and left no noticeable traces.

We found when we began to arrange things in their places that our color scheme had worked out beautifully. The warm browns and tans we had selected for woodwork and walls made a most

excellent background for the soft toned oriental rugs. A brighter tone was easily given now and then by some cushion or window drapery. The pictures, and particularly the bric-a-brac—which had never had a proper background—gave all the color needed to the room.

Like children we joyed in arranging our belongings, it was such a pleasure to hang a picture or place a vase in just the right place. Then, when the book shelves were filled—not shut up behind closed doors in some dark corner where

it was almost impossible to see what was there,—but open shelves out in the light where one could turn any time and pick out what he wanted—and when the large, roomy table with reading lamp at hand was in its place, close beside the books, when all was finished and in place we sat down and looked it all over. While it was not a mansion, it was cozy and comfortable and gave the real home feeling, than which there is no greater sense of satisfaction, for is heaven itself not home?

Variety of Design in Bungalow Building



The first impression leads one to expect pleasant surprises.



It is a curious fact that you can take a group of well designed bungalows which may have several strongly marked features in common and yet find an infinite variety among them. The group of bungalows here pre-

sented have the distinctive bungalow features. They are all of them low and rather wide spreading, having wide projecting eaves, low pitch of roof and generally exposed timber work, yet without a sameness, and each of the group has its own



Flower boxes in the boulder wall.

peculiar charm and attractiveness.

There are two points of view from which a house makes its appeal; first, in its relation to the landscape and the surrounding houses and its general environment, and

again as it impresses one from the approach and on entering the house. First impressions are very potent and follow one through the house and often for a considerable space of time. It is hard to over-



The light and shadow of the clinker brick gives texture to the wall.



The planting brings out the especial interest.

come the impression given by a mean or crowded entrance, while the anticipation of a beautiful interior in itself adds to that beauty. This is true of a bungalow, perhaps more than with another type of a house, because the entire building itself does not extend far above the reach of the eye on entering.

The first bungalow shown loses the sense of being a small low building when one stands between the great cement piers at the entrance to the porch. Instead, a spacious house spreads out before one. The glass filled space between the great piers invites one inside. The whole treatment shows the individuality of the owner and



With unusual timber treatment.

leads one to expect pleasant surprises in the more intimate parts of the house. The louvre treatment under the roof is an example. It makes a pleasing spot of decoration while performing the very prosaic role of giving a free circulation of air under the low roof and keeping the rooms cool notwithstanding heat of the sunshine.

Cobble stones or boulders, to speak more exactly, have been made a feature of the

With the growing appreciation of cement it is being more largely adapted to the uses of the bungalow builder, and its peculiar adaptability made an integral part of the design. It is used merely as a stucco surface which may replace any wood surface, siding, shingles, shiplap, etc. In a somewhat different type of house it is plastered on hollow tile, making a warm, fire resisting, and not very expensive mode of build-



The flat roof is a logical treatment for a concrete bungalow.

second bungalow. This is a building material which gives all kinds of advantages in its possibilities of picturesque treatment, and in the facility with which it combines with practically any material which it is desired to use with it. Here again the openings for ventilation under the ridge of the roof have received a studied treatment.

In California much has been made of clinker brick, with its uneven and often vitrified surfaces, its varied texture and sometimes exaggerated contour. In the brilliant sunshine the shadows, when not too pronounced, often give a very interesting texture to the whole surface.

There are great possibilities in poured concrete, with or without reinforcement, as well as in stucco, especially for the one-story bungalow, and these possibilities have scarcely been touched upon as yet in a practical way. A plastic substance like concrete is, or may, be developed into a truly architectural building material, but this will not be accomplished by imitating other materials, nor by following the forms which have been found best adapted to the treatment of these very different materials which are being imitated. When cement is moulded to look something like stone, as for instance in "rock face cement blocks" it is

simply a rank imposition. It lacks the good qualities of both materials without a commensurate gain.

The pleasing surface of stucco makes it adaptable. It may be used with a timber or a half-timber treatment. It makes a particularly good background for planting, and especially for vines. Oftentimes the planting tends to bring out the especially

with either cement or stucco are almost without limit, both as to texture and color or tone, rather, for fortunately we hardly dare use color directly. The introduction of bits of color and texture by means of tile let into the surface, or panels of form in low relief, or even of terra cotta, embodying both, is often very successfully carried out. This treatment, however,



The shingle treatment is interesting.

attractive features of a house, attracting the eye directly to a pleasing line or a nice detail.

A flat roof, with a low parapet, is a logical treatment for the concrete bungalow, the circulation of the air under the roof being taken care of in a different way. The details of a concrete building depend on the practical building of the forms in which they are poured, which tends to a simplicity of line and uniformity of surface.

The possibilities of surface treatment

has wide possibilities not yet touched.

Shingles always make a satisfactory outside finish for almost any type of a house. An excellent surface is given by laying the shingles alternately with a larger and a smaller surface to the weather. In this way the shadow line at the edges gives the effect of a double line, which relieves the monotony of the usual shingled surface. Another advantage lies in the fact that the stained surface of the shingle is so much softer than a painted surface.



What Is a Genuine Bungalow?

E. W. Stillwell, Architect

IN a restricted sense, the bungalow is a style in architecture; in the broad sense it has also to do with the arrangement of rooms and the in-building of much of the interior finish and labor-saving equipment. To understand this new style in home architecture, we must study its origin and the reasons for its development. To study styles in anything we look to the

source. Therefore we look to California, the original home of the American bungalow, for the finest specimens of bungalows.

It takes a kindly climate and a beautiful land to produce original architecture. Witness the history of ancient Greece and Rome whose architectural forms still rule the world after two thousand years. The



A fine type of California Bungalow. (Floor plan on page 276.)



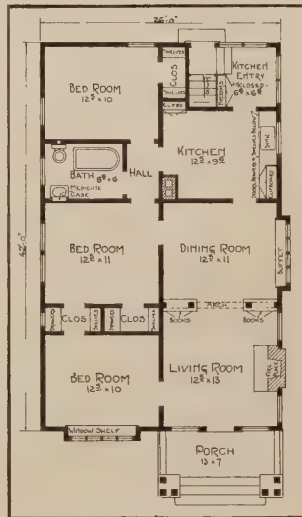
A bungalow should be a compact one story house.

bungalow architecture of California is a natural product of the Pacific Coast and in addition, countless examples of other styles are represented here. Out of the steady stream of tourists who go to California for one reason or another, there are many who remain to add their energy and wealth to the upbuilding of cities and suburbs. California—especially Southern California—has drawn upon the wealth and brains of all of North America because the climate and the soil furnish ideal conditions for ideal homes. Irrigated by this human element and the product of accumulated labor, the State has produced, in its homes, results as wonderful as the proverbial little drops of water on the thirsty land.

The bungalow has all the good points of the American cottage type and borrows from every style that

exists today. Strictly speaking, a bungalow should be a compact one-story house, but it may have an attic or second half-story, if large enough in first floor area to permit of roofing in such a manner that it is recognizable on the whole as a one-story house. Others, going further, consent to an obviously roomy second story if the roofing scheme is carried out with an overgrown, or outgrown, or upgrown effect, but in California this is called just a "house," as a rule.

The roof of the true bungalow should not be too steeply pitched and it should have a wide projection—thirty inches to as high as forty-four. The over-hang finishes with a heavy barge or verge board supported by brackets or by massive timbers that run back to second rafters. The over-hang is well calculated to protect side





The overhang of the roof protects from the vertical summer heat.

walls from the vertical summer heat and yet this is so high that, as the sun declines in winter, the warmth of his rays is not shut off from the windows. The roof of the bungalow is its most distinctive feature.

Every building material on the market enters into the exterior construction of bungalows, but since the spirit of the bungalow is simplicity itself, only combinations of a few—like siding and shingles, or cement plaster with shingled gables — are permissible. Rough or smooth siding is used but all finish pieces are generally surfaced. Most bungalows are stained instead of painted (except for trimmings) and stain takes best on rough siding.

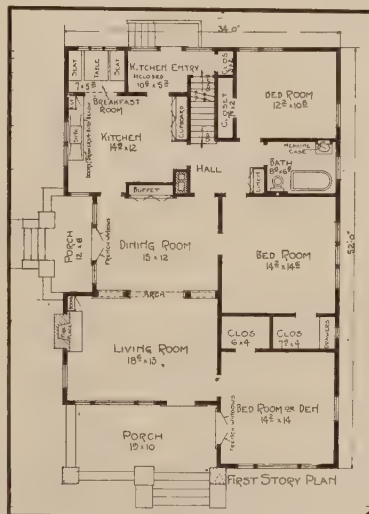
The real bungalow

eliminates hall space by a grouping of rooms around an inter-communicating pass hall. The reception hall is cut out, as a rule.

Few genuine bungalows have pantries. The cabinet kitchen of the bungalow eliminates the objections of the pantryless kitchen of former days.

The kitchen cupboards have drawers, bins, wood paneled doors, sink under the windows for light, and all arranged within easy reach of the range: All finished in sanitary white enamel.

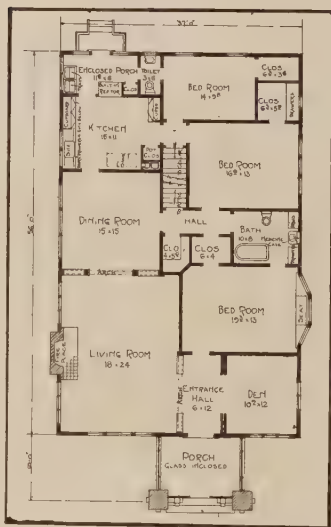
The beamed ceiling seems to be going out of style and a molded coved wooden cornice taking its place, at least in the living room where indirect lighting is employed. Most every bungalow, for interior



effect, has one fireplace of simple design but the best homes, even in California, are equipped with an efficient warm-air furnace or other heating system.

The walls are made clean and sanitary by laying off smooth polished plaster to a height of door tops, marking off in squares like tile and enameling like the wood work.

The screened-in kitchen porch is one of the bungalow essentials. This porch is really a small room, for it is framed up and finished outside and plastered or ceiled up inside like the kitchen. The screened openings are high above the floor and very often fitted with sashes for weather protection. The screen porch is really a semi-detached



work room or entry, usually containing a broom closet, a hinged ironing board, the refrigerator, and often laundry tubs except in coldest climates.

Bungalows have more windows than other houses. Casements of all types are used extensively, but most generally only for the smaller size openings. Many of these are special shapes and designs, but simple stock sizes are obtainable in the west. Eastern mills are not yet making all the stock size windows that are most suitable

for bungalows.

Many minor features are found in bungalows that go far toward beautifying the home and making life easier and happier for everybody.

A Group of Northern Bungalows

Lindstrom & Almars, Architects

THE spell of the bungalow has overspread the land. A native development of Southern California, the returning tide of tourists has spread its fame and popularity far and wide. The name has carried farther, perhaps, than the direct influence of the type of building itself, and its details have been appropriated and applied to every type of building. The name "bungalow" has become so closely associated with the compact, well planned small house which is homelike and attractive, with wide projecting eaves on the outside and many built-in conveniences made a feature of the interiors that the term has been loosely applied in many parts of the country; all of which goes to show the dominance

of an idea over the form in which it is embodied. In California the bungalow clings to the ground and draws its roof closely over itself, emphasizing the low horizontal lines. It does not require the protection of a basement underneath, which must have light, nor of the air space over, which the extremes of heat and cold make necessary in other climates.

In the bungalow which has snow about it, one looks for the high basement which gives space for basement windows. When the cost of the basement is to be considered the small, inexpensive house can not be spread out on the ground floor and the roof must be high enough to give space and light for sleeping room under



A snow-clad bungalow.

the roof. Also the sun and sleeping porches are glassed in as closely as the rest of the house.

Here are a group of snow-clad bungalows which bespeak comfort in the bracing northern air. In the first design the glazed sunporch becomes also a bright, protected entry. The living room extends the full width of the house with a fireplace at one end and a recessed window opposite. Beyond is the dining room through a wide cased opening. A recessed bay on one side is filled with a built-in buffet under the windows. A cabinet kitchen opens from the dining room.

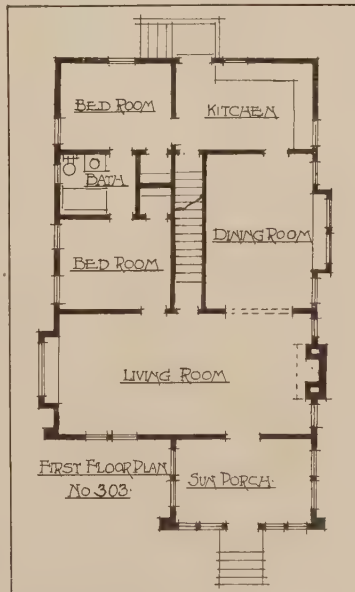
From the other side of the living room a door opens into the bedroom suite formed by the bedrooms, bath and closets,

and the intercommunication between them, which is very convenient for family rooms. Another door opening from the living room leads to the stairs and the bedrooms which may be finished under the roof. Stairs to the basement lead down from a door in the kitchen.

The main living rooms are finished in birch with birch floors. The bedrooms are finished in pine and enamelled. The bath room floor is tiled.

A full basement under the house makes place for the laundry, vegetable and fruit closets, as well as for the heating plant, fuel bins, and storage space.

The exterior of the house is stuccoed. The timber work is all stained brown and the sash painted white. The



flower boxes which during the summer make the house gay with color and fragrance, are built permanently in the wall, resting on brackets.

A similar arrangement of floor plan for the living rooms provides for only one bedroom down stairs in the smaller home. The porch is open and the living room is practically the same size as in the larger design, with the dining room beyond. The buffet is recessed and built

The third home shown in this group, has a glazed entry as well as a sun porch. Glass enclosure for all porches and openings, is one of the marks of the northern bungalow. During the warm weather they open freely and are screened, but during the cold season they are all enclosed with sash or even double glazed.

Beyond the entry is the living room on one side and the bedroom suite on the other. The long side of the living room



No. 302.

A small, compact home.

in under a wide window, opposite the cased opening to the living room. The stairs lead up from the dining room and down from a closet or passage way beside the kitchen. These rooms are finished in hardwood.

One end of the kitchen is filled with a long working shelf under the window, with drawers and bins under. There is also good storage space.

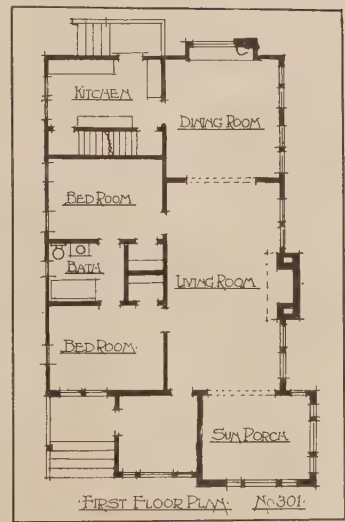
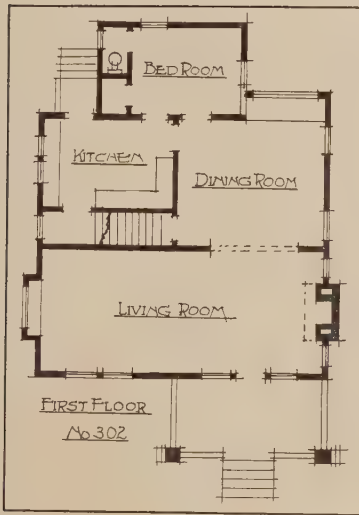
The bedroom opens from both the kitchen and the dining room so as to be accessible from either.

The basement has the usual accommodation for heating plant, laundry, etc.

is on the exposed outside wall and is filled with windows on each side of the fireplace. The sun porch is at the front with a wide cased opening connecting it with the living room.

The dining room is beyond the living room with another wide opening between. The vista is closed by the recessed sideboard under a wide window. Windows fill the side of the dining room as well.

The cabinet kitchen opens from the dining room and is fitted with working shelves and cupboards. Stairs to the attic space and to the basement lead from the kitchen.



The bedroom arrangement is very compact. Each bedroom opens from the living room and has a good closet. The bath room communicates with both bedrooms.

The main rooms of the house are finished in birch and the other rooms are finished in white enamel. The bath room

has a tile floor, all other floors are of birch.

The exterior surface of the house is stuccoed to the grade line with brick used for the terrace and sun porches. The eaves have a wide overhang and all of the timber work is stained, while the sash is painted white.



The porches are glazed.

Some Practical Bungalows

W. W. Purdy, Architect

THE bungalow is being demonstrated in all parts of the country and is proving itself as a practical solution of some of the problems of the home builder as it can be arranged to give him what he wants at a cost that is not beyond his means.

well sheltered from the heat of the sun, or from driving rains. The large rear porch is also screened and may be used as a dining porch in the summer months. In the cool fall evenings the visitor is ushered from the living porch, into the large living room, where a log fire is

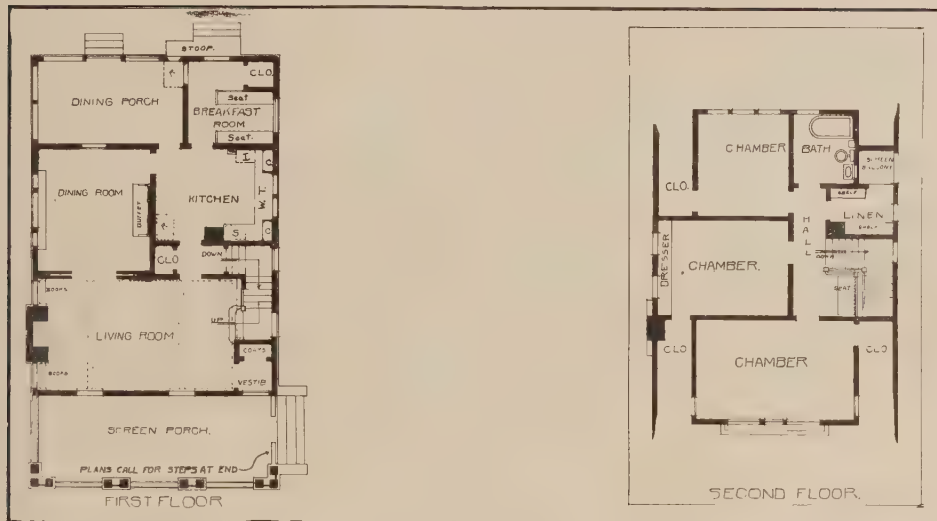


Planned for a lake cottage but used all-year-round.

In the first illustration is shown a type of bungalow or story-and-a-half cottage which is very popular in our northern states. This home was planned for a small family, to be built near a small lake some ten miles from the city limits. While a lake cottage, the owner contemplates living in it the year round; it is therefore complete in all details in regard to water supply, septic tank, gas or electric light plants.

The large screened-in porch across the entire front, makes an ideal living porch

burning in the large boulder fireplace. The ceiling in this room is broken by two massive beams through the center; book-cases flank the fireplace on either side. From the living room one gets a glimpse of the attractive dining room, with its built-in buffet, through French sliding doors. The extended window stool is to provide a ledge for plants. A French door leads from the dining room on to the rear dining porch. The kitchen is not only complete in its equipment, but very convenient, there being a place for



everything and to be sure, everything is in its place. Note the compactness of the same, the range, sink, china cupboards, work table under the windows, an additional drop table, the clothes chute. A breakfast room adjoins the kitchen, where built-in seats and table are constructed. The ice box is on the dining porch, is iced from the rear stoop, and opens into the breakfast room.

The floors in the living room and dining

room are of birch, with linoleum over a pine floor in the kitchen and breakfast room. There is a coat closet off the vestibule and an extra closet on the first floor, also a closet in the rear entry, to be used as a storage place for table leaves, brooms, etc.

The finish for the rooms on the first floor is fir, with pine white enameled in the kitchen and breakfast room.

The second floor contains three well

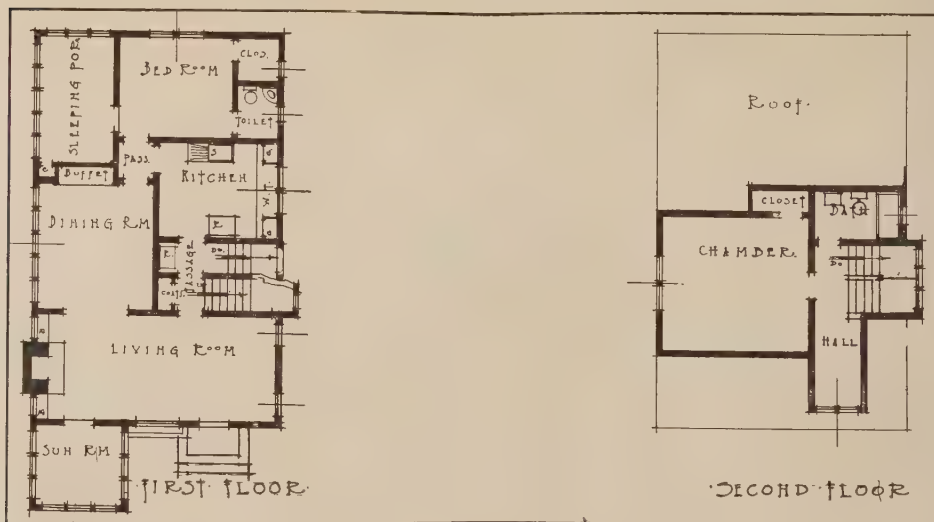


A charming small home.

arranged chambers, all well lighted and ventilated, each having good wall and closet space. In the daughter's chamber is a built-in dresser across the end with beveled plate glass mirrors, drawers, and hat boxes. Beside the large bath and linen closet, a thing of interest is the little screened-in balcony, the screens being hinged to open out, the same as casement sash, so the balcony can be used for shaking rugs and airing bedding. The

planned. In addition to the living rooms it has a bedroom suite with a sleeping porch on the first floor and a larger chamber and a bath room on the second floor.

The living room extends across the entire front, with a large boulder fireplace and built-in bookcases across the end, a French door opens on a sun room in front which is fitted with casement sash hinged to open in. The dining room is exceedingly attractive with its grouping of win-



floors are maple with tile in the bath. The finish is pine for white enameling.

The full basement contains a laundry, fruit cupboards, fuel and furnace room, also the engine for the water supply, the electric light plant, etc.

The exterior is a combination of white cement, rough cast, and shingles stained wood brown. The roof shingles a dark green, together with the bright red brick base course, piers, and steps, which gives a touch of color and a feeling of warmth in winter. A cobble stone chimney on the outside might be substituted for the brick, if desired.

In the next design we have an attractive bungalow which is very compactly

dows across the end, and its built-in buffet. The entrance to the dining room from the kitchen is through a small passage or rear hall, instead of being directly into the room. From this hall is a door leading into the rear bedroom. Opening off the bedroom is a large sleeping porch, a toilet, and a good sized closet.

The finish in the living room is of fir. The rest of the house is finished in pine, white enameled, with birch doors stained mahogany. The floors throughout are of maple except for the bath and toilet, which have tile floors.

The kitchen is very complete and convenient with its built-in work table, cupboards, flour bins, etc. The refrigerator

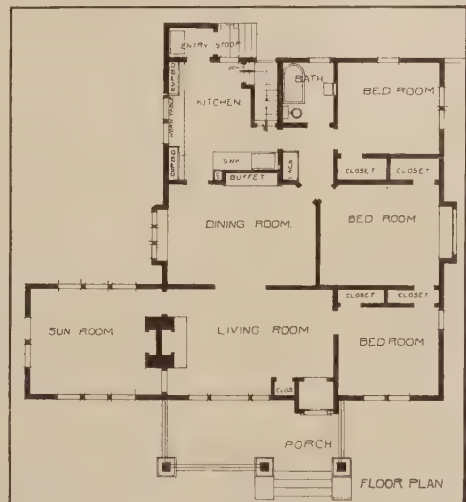


Seven rooms on the ground floor.

stands in the kitchen entry and is reached from the grade door on the stairs to the basement, for icing.

The plan as illustrated in our third design, shows a seven-room bungalow. The rooms are all large with ample wall space, plenty of windows and cross ventilation. The extended porch in the front is equipped with canvas curtains. The entrance from this porch is through a small vestibule directly into a large living room with its built-in fireplace. The coat closet which opens off the living room is convenient to the front door. A large sun room off the living room is reached through a French door, and this also has a brick fireplace. The dining room is unusually large, having an attractive built-in window seat and buffet. The kitchen is fitted with built-in cupboards and work table underneath the windows. The refrigerator is located in the rear entry convenient to the kitchen. A stairway leads from the kitchen to the second floor which provides storage space, or if desired, two additional bedrooms could be finished off. The stairway to the basement which is under these stairs provides a door at the grade level. On the other side, three good bedrooms with ample closet space are provided. The front bedroom opens direct from the living room. This has a connecting door between it

and the center bedroom, where the two rear bedrooms and bath open off a small center hall where a built-in linen closet is located. The concrete foundation extends under the entire house, exclusive of the sun porch. The basement is partitioned off to provide rooms for a laundry and a drying room, furnace, fuel, and vegetable room, as well as a billiard room. The floors throughout are of birch with tile in the bath, and pine in the kitchen for lineoleum. The finish for the main room is of quarter sawed white oak. The bedrooms are finished in white enamel with birch mahogany doors.



Modern Stucco Bungalows

Chas. S. Sedgwick, Architect

WE are in a period of revolt against the "ordinary," in our attempt to gain something better than what we see about us. "What a cute bungalow—it is so different," is often intended as the highest commendation. As a matter of fact it is not the startlingly new

of opinion concerning the relation and the communication between the rooms in the convenience of the family in their ordinary living. Many people desire a large living room even if in so doing part of it must be utilized as a general passage way and means of communication



Built to fit living conditions.

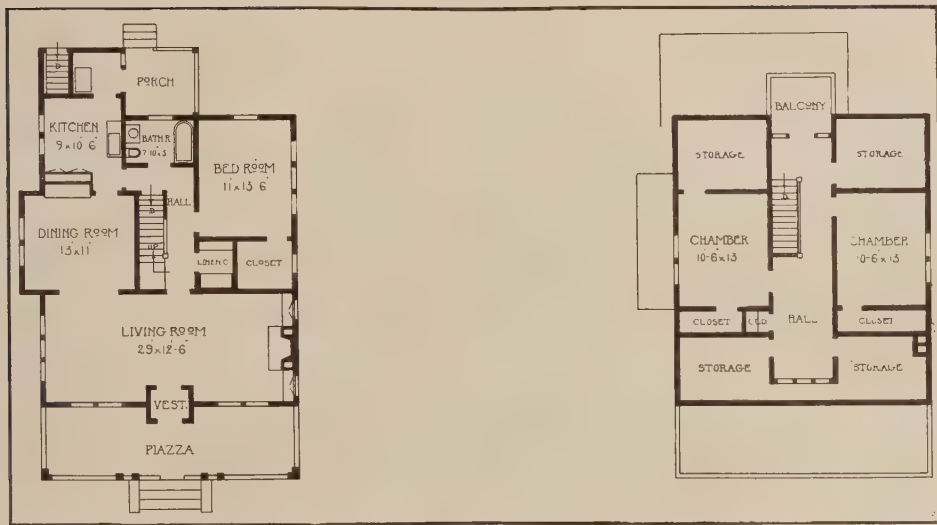
and different things that we really want so much as gathering of all the good points in the design by which the new home is to be built. Instead of hunting for novelties what we need to do is to standardize the good points; the features which are essential to the comfort and the conservation of the energy of the home makers, remembering that this comfort is never quite complete when there is anything which offends the sight, for a certain quiet beauty follows good design.

There is perhaps the greatest diversity

between the different parts of the house. The dining room may also serve this use without inconvenience in many instances. Where this is possible considerably larger rooms are possible in the same space.

Here are two bungalows which give perhaps a maximum amount of space in the size of the rooms for the given floor space. They are compact and built to fill the living conditions of the owners. The first has sleeping rooms under the gable, the second is all on one floor.

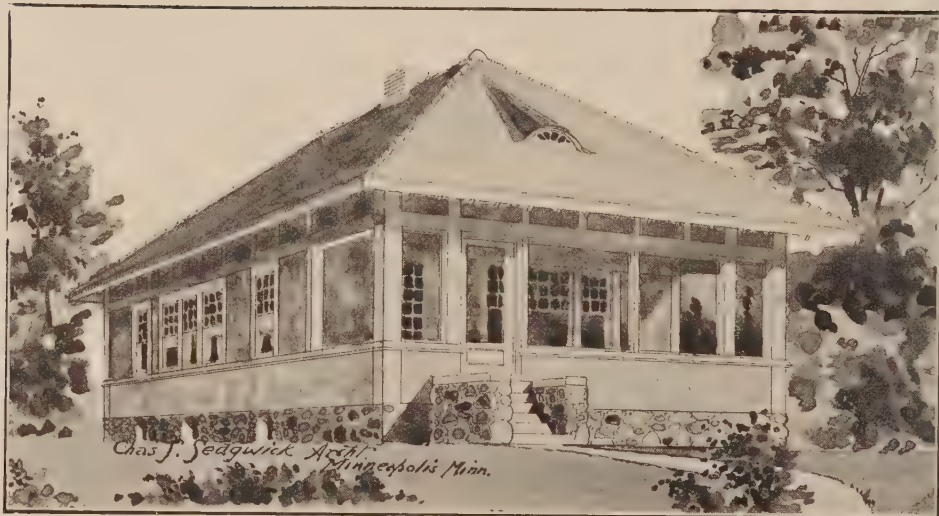
The first bungalow is 30 feet in width by 50 feet in depth, including the front



piazza and the rear extension. It has four good rooms, including bedroom and bath room as well, on the main floor with central hall and stairs. On the second floor are two good chambers with large closets and ample storage space under the low portions of the roof. This bungalow was recently built for \$4,000, including heating and plumbing. Exclusive of heating and plumbing the architect estimates it could be built for \$3,200 to \$3,600. It has a good full basement under the main part and is well built throughout. The first story is 9 feet high and the second story 8 feet. It is frame construction, well timbered and strongly built, sheathed and papered on the outside and finished with cement stucco from the grade line to the roof. It is also back plastered. The inside and the walls are plastered and neatly papered. The finish in the large living room and dining room is oak and the finish in the rear portion and second story chambers is Washington fir stained. The floors are of oak and of birch.

The front is symmetrical with a center vestibule opening into one large main living room 29 feet by 12 feet 6 inches. At

the right end of living room is a wide open fireplace with book shelves on each side and small casement windows above. The design is arranged for an east front, bringing the end windows in the living room, dining room and kitchen on the south side. A glazed French door in the center opposite the entrance, opens into a central hall with stairs leading to the second story and basement stairs underneath. At the right of this hall in the rear is a fine bedroom 11 feet by 13 feet 6 inches with good closet and a large linen closet opening out of the hall. At the end of this hall is the conveniently arranged bath room. In the rear of the dining room is the kitchen, a recessed sideboard opening into dining room and back of it cupboards opening into kitchen and at the rear of kitchen is a closed entry with space for refrigerator and door opening onto rear porch making a very convenient arrangement. At the rear is a grade entrance with steps leading to basement. This plan throughout has had very careful study and the bungalow is very much admired. All of the exterior trimmings, casings, cornices, etc., are painted white and the roof shingles are



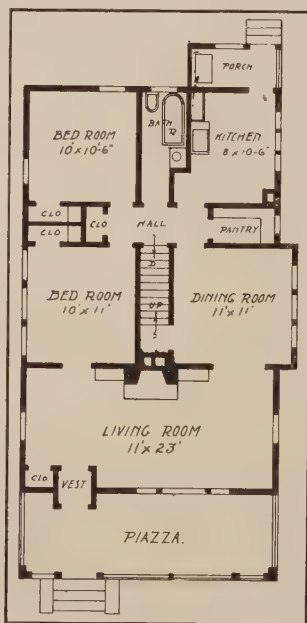
A small, compact home.

stained green. The front piazza is screened in. The second story hall is a pleasing feature with dormer windows in front and rear.

The second home illustrated shows a bungalow design 24 feet in width and 46 feet in depth including a front piazza which is 8 ft. in width. This is a very simple and economical little home and one that can be comfortably built on the average narrow city lot. There is a good full concrete foundation with basement under whole house. With the architect's estimate of cost from \$2,000 to \$2,500, the construction is of frame with boulder stone showing above grade line to floor and cement stucco above on metal lath. If hollow tile or brick were to be used for outside walls, it would add \$500 to the cost. The wood casings, cornices, etc., may be given

a coat of dark brown creosote stain and the roof shingles the same or red. The arrangement of rooms is pleasant and convenient, with one main large living room across the front and vestibule entrance at the side. In the center of the living room

on the inside wall is a broad chimney and fireplace with book shelves on either side; at the right of chimney is a wide opening into the dining room and at the left is a door to one bedroom. Between the dining room and bedroom is a stairway leading to attic story and basement stairs underneath, the small rear hallway connects with a bedroom on the left and with the kitchen on the right and between the two is the bathroom. There are three clothes closets and one small coat closet in front. Between the kitchen and dining room is a small pantry with an outside window and with shelving on one



side. In rear of kitchen is a small porch entry with space inclosed for refrigerator, this porch may be screened in summer and glazed in during winter months.

The modern bungalow is doing much to standardize the requirements which a small home should give to the home builder and which at the same time can be built at a

moderate cost. While many people are asking for "something different" in the main features they are all asking for the same thing—the greatest degree of comfort and convenience which can be gathered within the four walls of the home which shall conserve the time and the energies of the home keeper and of the family.

A Unique Bungalow

Jud Yoho, Architect

A UNIQUE but attractive type of bungalow is here shown. Presenting a combination of Japanese influence in the roof design and the horizontal lines of the half-timber work in the walls. The wide sweep of the roof and its curious details is the unusual feature of the design. It shows heavy timber brackets and has not of itself any

great weight. The architect assures us that this roof construction is adaptable to any climatic conditions, but makes the provision that in sections subject to heavy snow fall the roof should be especially well braced. The exposed rafters and the treatment of the louvres under the ridge of the roof adds to the Japanese effect, as does the tilt of the timber work at the heads of the windows, and the window group itself.

This grouping of the windows with the triple group on the side of the living room makes a sun room of the living part of the house, together with the bay in the dining room.



A bungalow influenced by Japan.

The plan is a convenient one—the four rooms are of good size and well arranged for the living space and for economy in heating as well. The large living room and bright dining room make this a splendid plan for a summer home at the beach or in the woods. The bay adds to the width of the dining room and the cased opening between the two rooms adds to the size of both, while the recessed bay from the living room with its built-in seat makes a small reception alcove where a chance caller may wait. It is the more convenient because it is out of the sight of the dining room.

The projection of the bay has the effect

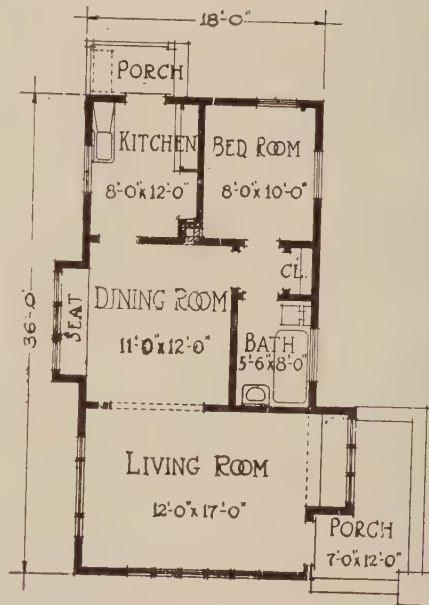
of recessing the entrance and giving it a slight protection, while emphasizing the approach and the terrace.

Beyond the dining room is the compact but convenient kitchen with its built-in cupboard, and well lighted sink, under the window. The rear porch makes a place for the refrigerator.

Opening from the dining room is a tiny passage way with the closet on one side, which connects the bedroom and the bath, and at the same time shuts them from the living part of the house. While these rooms are not large they have good light and cross ventilation and are conveniently arranged.

The whole house is eighteen feet by thirty-six—a very convenient dimension for a narrow lot, and an inexpensive house to build.

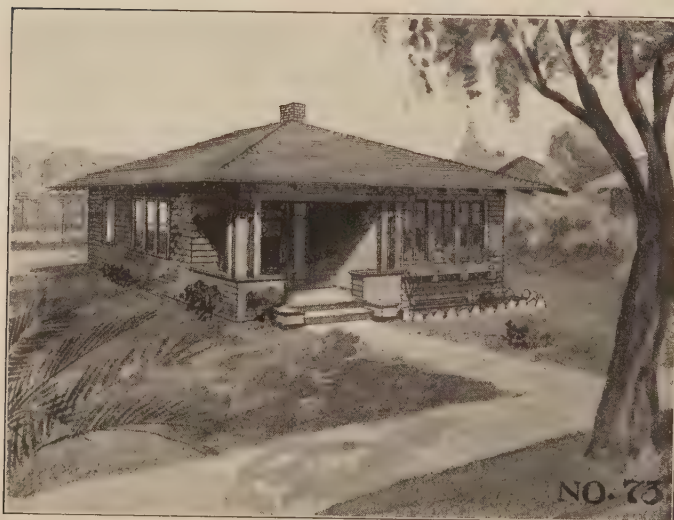
The exterior is of cement stucco plastered over galvanized metal lath, put on in the best possible manner in order to prevent checking and cracking.



FLOOR PLAN
No. 462.

A Snug Little Bungalow

Bungalowcraft Co., Architects



A home built at small cost.

THERE is always a demand for a convenient attractive little home which can be built at small cost, and the one shown on this page has proved very popular, containing as it does so many good features at the minimum cost. There is not a jog nor an extra projection to the exterior and this always means economy in construction, — jogs

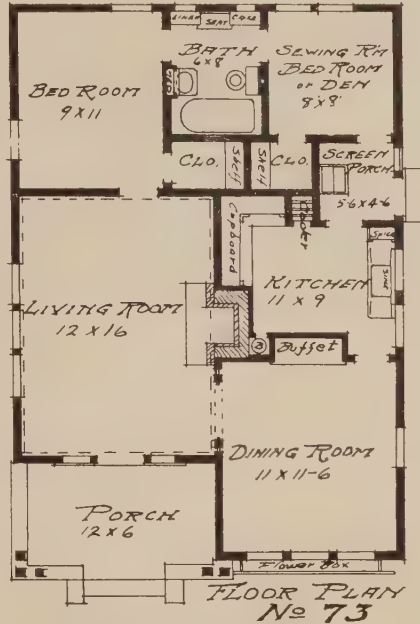
always run into expense, sometimes useless. The exterior is of weatherboards,—roof of shingles and so well braced that the occupant may smile at any amount of snow. The plans may be had either as shown in the picture or completely reversed so that they will adjust themselves to any location. The floor-plan shows the inside arrangement clearly but attention should be called to some features.

There is only one chimney but this carries a flue for the fireplace, one for the kitchen range and there is ample room for a separate flue for the furnace in locations where a cellar and furnace are required.

There is a pretty little buffet in the dining-room, which by the way has a pan-

eled wainscot and plate-rail and being to the front is one of the most cheerful rooms in the house. This is an important consideration in any home because if there is ever a time when someone in the family has a grouch it is at breakfast, and a

bright, cheerful dining room is a fine grouch-killer. The small room at the rear can readily be built as an open air sleeping room if desired. There are lots of closets, and a tiny screened porch and entry beside the kitchen. The kitchen is a model in its way with plenty of cupboards, closets, bins, etc., and all placed exactly right. In fact it looks as if this bright, cheerful kitchen should prove one of the most attractive rooms in this very charming little home.



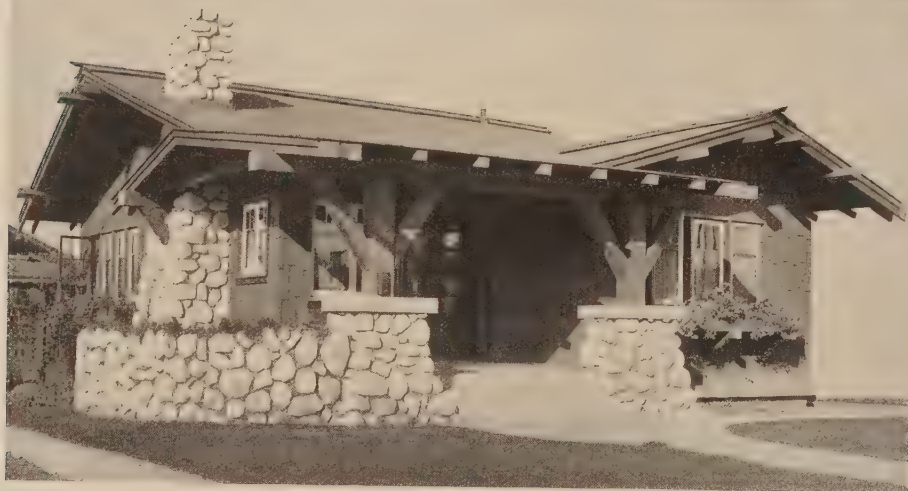
Homes of Individuality

Selected by W. J. Keith, Architect

SO closely is the bungalow identified with California and its mild climate that one feels the necessity of showing on the exterior the adjustments that have been made in its construction to fit it to the requirements of more extreme climates.

Here is a charming bungalow adapted to the cold weather of our northern states. The cobblestones, nature's own building material, used so very attractively in this design, together with the heavy timber work and wide coursed shingles of

the exterior, give it that rustic, homelike appearance so hard to obtain in a bungalow when one must build for warmth. The retaining wall of these same cobblestones extending clear across one side of the house is a very unique idea, and planted with ferns and flowers, would add infinitely to the beauty of the design. With the shingles on the exterior stained a soft brown, and the roof shingles green, the white painted sash makes a pleasing contrast, and adds just a little touch of lightness that gives a cheerful



The retaining wall of cobble-stones—nature's one building material.

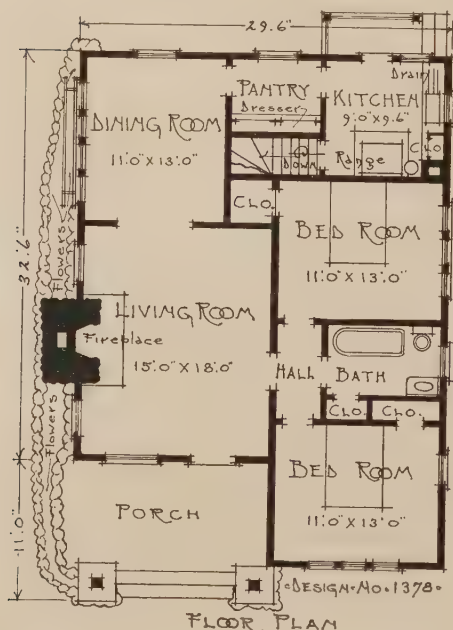
impression, and relieves the dark tone.

In floor plan arrangement, this design is exceptionally compact. The living room is of generous size, and with the broad open fireplace across one side

makes an unusually attractive room. A wide cased opening connects with the dining room, another large, well lighted room, with a flower box below the four casement windows. A swinging door leads from the dining room to the pantry, which is located most conveniently between kitchen and dining room and has plenty of cupboard space. The kitchen is equipped with all the modern conveniences, has an outside rear entrance, and has a door leading to the basement.

Two beautiful bedrooms are provided, both of which open off a small hall which connects with the living room and bath. These rooms are both furnished with plenty of closet space and ventilation. The bath is conveniently located between the bedrooms and contains the linen closet. Under the sill of the front bedroom windows there is a very attractive flower box which adds much to the effectiveness of the exterior design, while not adding much to the expense.

There is a full basement under the entire house, where are located the hot water heating plant, laundry, fuel bins, vegetable rooms, etc.





A cement bungalow.

Taken altogether this little bungalow with its cozy porch nestling under the low spreading roof makes a home of unequalled beauty and comfort. The architect estimates that it can be built complete for \$2,800, and its attractiveness makes it very popular. In size it is 29 feet 6 inches wide, and 32 feet 6 inches in depth, exclusive of porch and front projection.

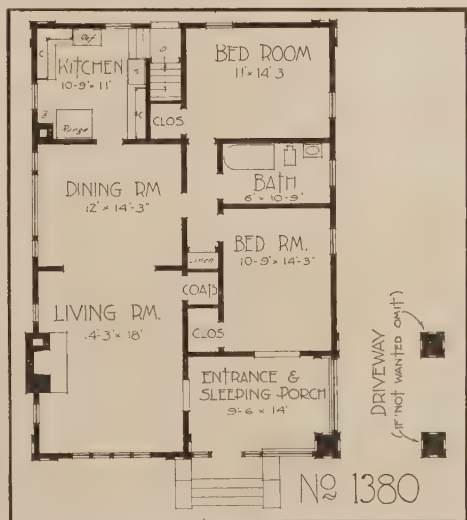
This cement bungalow with its almost flat tar and gravel roof is also very attractive in appearance and very conveniently planned. The piers of the porch and of the porte-cochere are paneled as are those on the corners of the house. The wide projections of the eaves are carried on timber work which is continued in a pergola effect over the driveway.

The plan gives five good rooms, the living and dining rooms and the kitchen on one side of the center partition, and the sleeping rooms on the other side of the house. The living room and dining room open together with a wide cased opening. The windows are well grouped and the fireplace is centered between windows.

Each bedroom has a good closet with a closet which may be used for coats,

opening from the living room. The linen closet opens from the bedroom hall, which connects the sleeping room and the bath.

The kitchen is well supplied with cupboards. The sink is well lighted and the refrigerator is on an outside wall. Four steps down from the kitchen is the grade entrance and the stairs continue to the basement.





A Center for the Family Life

THE accompanying interiors show a general family room with sun room adjoining and a charming dining room. This living room was originally two rooms, but the owner secured the services of a clever architect who could see possibilities in the arrange-

ment of the home. The inside wall was removed and a new fireplace of beautiful faience tiles was substituted for the old one. A sun room was built on and doors cut through on both sides of the fireplace and the result is a charming room, splendidly proportioned and well balanced.



The living room was originally two rooms.

INSIDE THE HOUSE

The wood trim is in old ivory enamel in a hand rubbed finish, with the French doors, mantle board, sills, etc., in dark, rich mahogany. The living room is a harmonious arrangement of skillfully handled tones of fawn and mulberry.

The walls are hung with a silk and linen tapestry in a fawn shade with a faint, almost invisible pattern which is brought out unduly in the photograph as this exposure was made under a powerful electric lamp. The windows are charmingly treated in velvet in a rich shade of mulberry and trimmed with dull old gold.

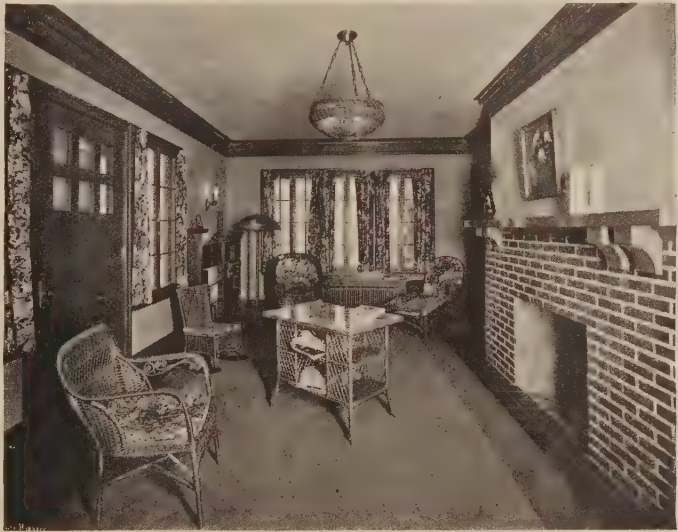
The group of windows to the left floods the room with a soft, mellow light, the glare being made soft and translucent by some transparent draw curtains of silk and wool in a pale amber shade.

These curtains are hung with rings sliding on a rod back of the valance and are easily adjusted by traverse cords. In addition to the French doors leading to the sun room, velvet portieres lined with English chintz have been hung in the openings and may be drawn when desired.

A heavy Donegal rug, eighteen by thirty feet, in a deep tan with shades of maroon, gray, dull green and black, covers the entire floor and adds space and dignity to this livable room. A luxurious over-stuffed davenport covered in a Jaspe stripe mulberry velvet is conveniently arranged in

front of the fireplace and with the well placed library table and reading lamp offers a delightful loafing place to while away the hours with a favorite book.

The long narrow table is a handsome piece of dark mahogany with cane panels set into the end supports. The shade of the mahogany reading lamp is covered in



Furnished in wicker, with chintz lined wicker lighting fixture.

old gold silk and trimmed with a deep silk fringe hung from underneath a wide band of embroidered galloon in tan and dull gold bullion.

The radiators are built rather low and concealed with wooden grilles finished in old ivory, the tops being in mahogany with their loose cushions of mulberry velvet, trimmed with a dull gold cord. A clever conceit is the light weight folding fire screen in mulberry velvet and dull gold.

Opening out of the living room is a cool and refreshing sun room with casement windows on three sides offering a delight-

INSIDE THE HOUSE

ful view of a formal garden with a glimpse of a lake in the distance. The walls are in rough plaster finished in oil in a warm gray with the ceiling in ivory. The wood trim is in Washington fir stained in gray with a rubbed varnish finish. A feature of this room is the tiled floor with a border of beautifully shaded faience tiles in deep

with a piece of chintz spread under the plate glass top of the table.

The wicker bowl suspended from the ceiling is lined with chintz; likewise the reading lamp, which may be conveniently placed at any desired point and attached to lighting plugs in the baseboard.

The dining room is particularly noteworthy, executed in tones of old blue, but the photograph fails by far to do justice to this charming room.

The walls have been hung with heavy canvas and exquisitely decorated in soft, delicate tones of dull blue, representing a formal garden scene which gives to this rather small room a spacious effect. The woodwork is done in white enamel with the doors and casement windows in mahogany, which blends de-



Dining room in dull blue and white.

brownish gray carrying touches of amber and dull red. The floor covering is a seamless chenille rug with a deep pile in soft tan with a plain border in a darker shade.

The fireplace is built of "rug-faced" brick in dull red with touches of gray and tan. Draw curtains of English chintz are hung at the windows and arranged to draw with traverse cords, the conventional window shades being omitted.

The light weight wicker furniture is stained in a beautiful shade of grayish brown and upholstered in the same chintz

lightly with the wall treatment.

A soft diffused light enters the windows tempered by draw curtains of sunfast in a pale amber. Heavy curtains of dull blue velvet provide a decorative feature and correspond in color and texture with the upholstered chair seats.

The sixty-inch mahogany table and chairs are in the fine Adam style, the chairs being somewhat unusual with the deeply carved medallion in the center of the cane panels. A beautiful sixty-inch sideboard, not shown in the picture, is placed along the wall opposite the triple window. A



clever scheme to economize space is the arrangement of the china closet under the triple window. The shelves of this closet are of plate glass and adjustable.

The center lighting fixture of this room is ideal, an opalescent luminous bowl being suspended from the ceiling with antique sil-

ver chains. The candle side lights are also mounted on silver.

The room is exquisite in its carefully studied appointments, with a character quite its own to which the finishing touch is added by the handsome oriental rug in old rose, tan and ivory with blue.

Buying by Proxy

Keith's Guide on Home Decoration and Furnishing
Brings Some Notes from the Shops

Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration," a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given *free of charge*. Enclose stamp for reply.

Wicker flower boxes 10 inches wide and 3 to 6 ft. long contain a movable iron box. These boxes come with and without supports and in a variety of styles, costing \$5.00 and up.

Wicker furniture in ivory, relieved with black with the loose cushions in flowered chintz on a black ground will be very much in vogue this season. This style of furniture is suitable for any room and one or two odd pieces will always prove useful. Both rockers and arm chairs will cost \$15.00 to \$17.50 each complete with cretonne cushions.

A delightful bedroom treatment noticed in one of the show windows is a two-toned gray stripe paper that sells for 25c per single roll. A pretty 2-inch border in pink roses on a gray and black ground suitable for paneling sells for 10c per yard. The drapery fabric is a beautiful English chintz composed of baby rambler roses in pink climbing over a black and grey trellis. This chintz is 30 inches wide and costs 75c per yard.

The Home Builder and the Decorator.

TO those who are struggling with the problems of home building, for the first time, the relations between owner and decorator are often misunderstood. Numberless home builders fear to take advantage of the experience and skill of a decorator, thinking that their homes will lack individuality and that they will lose the opportunity to express their own ideas.

A successful decorator arranging a definite scheme, will consider a room or group of rooms from every angle, the purpose and suitability of each room, and

An unusual and pleasing bedroom paper is nasturtiums in soft natural colors arranged over a gray trellis on a cream ground. This paper will cost 50c per roll and is most effective.

Another paper well worth mentioning is a Florentine effect; a conventionalized rose design closely printed on a plain ground. The floral design is in soft gray on a cream ground and comes in various grades ranging from 25c to \$1.00 per single roll. Charming cut-out borders in any color desired may be obtained at 10c per yard.

Silk flowers are very much in demand for home decoration and some of the stores are featuring them very strongly. They are beautiful in form and color and will not fade. Some are charmingly arranged in pretty wicker baskets ranging in price from \$10.00 to \$25.00, while small clusters may be had at a nominal figure, suitable for grouping in wall pockets.

the tastes and ideals of the occupants. The decorator's goal is the creation of a beautiful room, harmonious in treatment, cheerful and restful, yet having its own distinctive charm. Seeking the aid of a decorator of the better sort does not mean the banishment of ones many cherished schemes and plans, but means instead the skillful working out of ones own half formed ideas and the elimination of all that is discordant and inharmonious.

In the average American home, the home maker does not have to solve the problems of style and treatment of wood

INSIDE THE HOUSE

trims, floors, etc., as that is generally advised or decided by the architect and is usually well designed. There is a notable tendency at the present time to have all the rooms on the first or ground floor connected with wide openings, which in the smaller home is a very sensible and practical idea, as it adds apparent spaciousness. In a home of this character the question of color, while not a serious one, requires more careful handling than in the larger home.

Planning the Vista.

Charming vistas may be arranged through a group of rooms by a careful selection of colors and clever placing of furniture and art objects. It is not always wise to arrange different color schemes in rooms opening together and having the same general treatment of wood finish as the eye is apt to be distracted by too abrupt changes. Where several rooms adjoin with large openings and present an uninterrupted view, it is a good plan to select a neutral color with a slight variation of tone in the different rooms, avoiding monotony by using contrasting colors in the hangings.

In the decorative treatment of a room the scheme of color and design must be planned from a foundation, as it is impossible to follow any set rules. However, there is one rule in the law of color harmony that must be adhered to, and that is to allow the floor covering to hold the deepest tone, the walls somewhat lighter, with the lightest shades on the ceiling.

Wall Coverings.

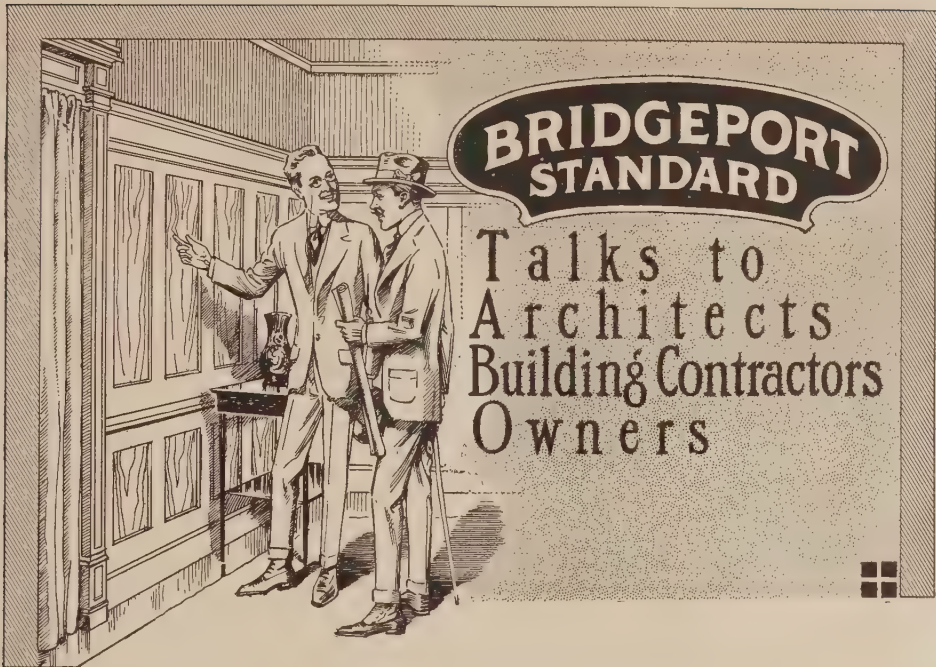
Perfectly plain papers and also textile weaves are very much in favor and a large and varied line in rich mellow tones with a good depth of color are now being displayed in all of the shops. Golden browns are again being shown quite extensively and there is nothing more satisfactory as they will harmonize with almost any other color. One of the new hangings is a golden brown paper in a textile weave with a slight suggestion of green. This paper makes a splendid background for pictures in dull gold frames and would be beautiful with velvet hangings of soft olive green.

Grays and putty shades make charming background and are more appreciated than ever before. Gray (if for the living room) is a color that must be selected very carefully and should be experimented with under both artificial and natural light in your own home surroundings before a final decision is made. A warm gray should be selected in which one imagines tones of amber, orange browns and dull rose without actually seeing them. Many home builders think they are getting this effect by selecting a Tiffany blend showing splotches of the colors as mentioned above, but this gives a very spotted effect and becomes decidedly monotonous. A cold gray in a living room is little better than the bare walls and even with dull old rose or mulberry hangings to liven it up, it loses its character and would prove very insipid.

Decorative Service

WHERE detailed plans for HOUSE DECORATION are desired with samples and prices of wall paper, fabrics, window drapes, etc., the moderate fee of \$1.00 per room or \$5.00 for the entire house will be charged to defray the expense of our decorator's time in working up the plan, securing and mailing samples. Address

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- Architect:** "Here is that job showing the new gray finishes that I've brought you over to see. It gives you an exact idea of the beautiful finishes that can be given to the woodwork of your new home."
- Owner:** "My, but they're fine—the best I ever saw. How did you get them?"
- Architect:** "Easily answered. The Bridgeport people put out the *real* grays. I specified a coat of **Bridgeport Standard Acid Stain**, two coats of **WonderLac** and the result is just what you see here—certainly they're the slickest, clearest grays I ever laid eyes on."
- Owner:** "I happen to have some knowledge of wood finishing and I must say that I've never before seen what I called a good gray. They're all more or less of a greenish cast. How did you overcome that on this job?"
- Architect:** "You get a greenish cast when shellac and wax are used as a finish. There's just enough yellow in shellac to kill the delicate gray tint; but you see **WonderLac** is colorless, so it retains that beautiful gray tone which the stain gives to the wood."

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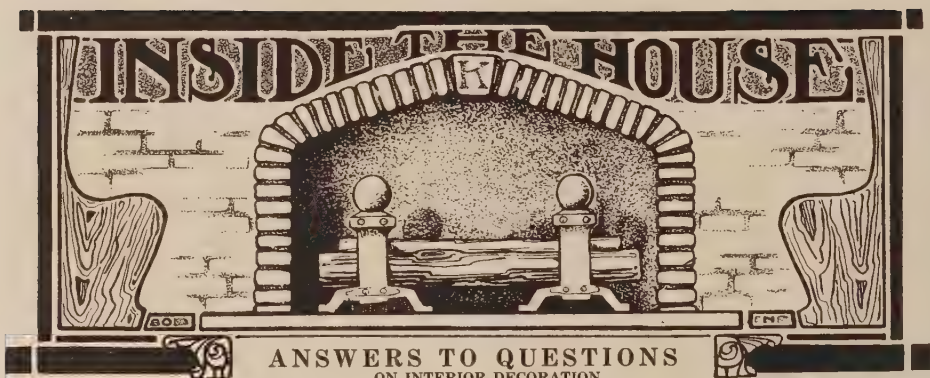
Architectural Service Departments:

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6 East 39th Street

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78 West Lake Street

Boston
8 Portland Street

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Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

White Paint, and Children.

F. E. C.—I want some help as to finishing and decorating my living room and dining rooms. I find world's of advice as to living room with southern exposure but only one with western exposure and that had white woodwork. I cannot have the care of white finish in the living room. This room has a western exposure with windows on the western side. The woodwork is to be finished in what they now call golden oak—dull finish. Would it be preferable to finish the room in the natural or "antique" finish, dull of course. I can accommodate the furniture to the room. I have sufficient mahogany furniture for this room, but I don't fancy the oak woodwork and mahogany furniture. I want to paper the room (living room) in light paper as the room needs all the light it can get. I have a beautiful old mahogany dining table, but do not want to use it until my children are larger.

Ans. We infer that your reason for not wanting white woodwork in your living room is on account of the young children. If, however, you will use a varnish paint and not flat, with dark doors, you will not find it very hard to care for. White woodwork would do much to lighten this dark room and as the dining room with connecting French doors already has this finish, it is the logical treatment for the living room. Also as you have mahogany furniture, it is all the more a pity not to give it a proper setting. The doors can be stained dark, brownish mahogany, or even dark

oak, thus getting away with the largest surfaces to keep clean.

You should have a soft golden ecru for living room. Wall of pale golden tan with cream ceiling. In dining room a deeper tone of Old Gold for wall and Old Gold Sunfast curtains at **outer** sides only of the group of windows, with perhaps a valance across the top connecting the two. This will give an effect of sunshine and be in harmony with either oak or mahogany furniture.

Willow for Bungalow Furniture.

A. B. G.—I am building a new bungalow; five room, with bath, small hall and two porches, and would be glad for your advice in the matter. In the large living room we have lots of windows, as you will see from the sketch. Please give me your suggestion as to white or ivory woodwork. The exterior will be stained brown, with white trim. Solid brick foundation. We will have a mahogany upright piano in living room and would like willow, upholstered furniture. What color would you suggest for the walls, rugs, and curtains? Fireplace will be brown brick with white panel above, reaching to the ceiling.

2. Dining room and living room have double doors, so I want your idea of dining room curtains and walls. These two rooms must harmonize, so that they can be thrown together at times. I had planned to use Circassian walnut in dining room and delft blue curtains and rug, and the wall same as living room. I thought

The Varnish Problem



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We have some interesting literature on wood finishing for the home builder. Write for it.

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LITTLE ROCK, ARKANSAS



INSIDE THE HOUSE

of using the delft blue and tan for dining room, and old rose and tan for living room. What kind of window shades would you suggest, also curtains in the two rooms mentioned?

3. My bedroom is furnished in bird's eye maple and rug is delft blue. Would you tint the walls tan or blue and use tan or blue curtains? Please suggest furniture and color for the bedroom next to the bath room.

Ans.—Your own ideas seem well considered and in the main are good. We think your plan of furnishing the bungalow living room in wicker with mahogany piano an excellent one. Many costly houses are using wicker furniture for whole rooms. Of course it is differently treated for different places. In a sun parlor, for instance, natural wicker upholstered in cretonne or plain, would be used. In a living room such as yours, the wicker should be stained and some of it upholstered in velvet. Velvet is not more expensive than the handsome cretonne, as it is very wide, 50 inches. Nothing would make your living room so handsome as this treatment and the velvet is most serviceable covering. We have just done a living room in gray stained wicker upholstered with a mulberry velvet. The walls are a good-gray. The rug is one of the new high-pile rugs, ground an Oxford gray with zig-zag line pattern in black and 3 inch black border. Such touches of black are the very latest, both on walls and rugs. The davenport has fumed oak ball feet and bands of fumed oak on sides and is upholstered in the mulberry velvet. Every one exclaims over it.

Such a davenport without back costs \$50.00. Ours sets against the gray wall and has three large square pillows of the mulberry velvet standing upright against the wall. It is a handsome and durable and exceedingly comfortable, all hair and spring edge, piece of furniture and we should make this exception in furnishing the room in wicker.

Thin striped net curtains are next the glass and over curtains of a lighter shade

of mulberry Sunfast Madras in a leaf design. There are portiers of the velvet on the living room side lined with cretonne on side opening into next room. We should not advise just the same wall in dining room, the ecru wall will be good there but not in living room, which should be more on the grays, yet not a blue gray. We should combine old blue with Circassian walnut rather than delft blue.

In regard to your own bedroom, the blue wall will be a good background for the bird's-eye maple, provided you get a soft blue, but not too light. A solid tint is rather a hard proposition to handle. With solid blue wall we would have for curtains one of the pretty white Madras with scattered figures in blue and no other curtains. White ceiling.

To Finish Pine.

J. R. M.—We are building a house and would like your advice as to the finish and color scheme of the living room, den and dining room. We are using hard pine for woodwork and floors. Dining room will have plate rail. I had thought of blue for dining room, since all the rooms are so well lighted. Furniture to be oak. The family prefers the natural finish wood, but am afraid it would not look well with the built-in work and oak furniture. What is your idea?

Ans.—Replying to your letter of recent date, would say that we think it would be a mistake to finish the pine woodwork natural. Such a finish will answer for a kitchen, but nowhere else. The pine should have a brown stain if oak furniture is to be used. In the bedrooms it should be painted white.

We think the old blue wall an excellent choice for the dining room and the walls of the den would be pretty in dull but not dark green; then use a cretonne in green and yellow for curtains and furnishing.

We should tint the living room walls a warm soft gray.

Columned Openings.

J. J. K.—I am building a six-room bungalow and it is to have an opening between den and living room, also between

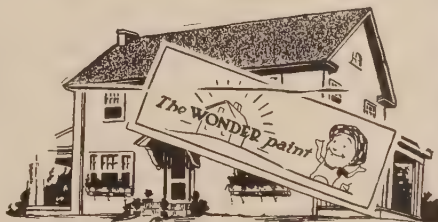
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INSIDE THE HOUSE

living room and dining room, and I would like to know just what style opening you would consider the best. We do not intend to close these rooms. The dining room is to have beam ceiling. What kind of oak floors would you recommend for living and dining room? We are considering maple for other floors.

Ans.—In reply to your inquiries we are not much in favor of what is termed columned openings between living and dining rooms. It is always advisable to be able to shut off the dining room on occasions, either with glass doors or with portiers. However, many people use the columned opening, but in this case a large folding screen, which can be interposed, is absolutely essential. No such objection obtains between den and living room, where any kind of an opening may be used, as the living room is small, we should have a wide, open arch here. White oak is excellent for floors in living and dining rooms. Maple is good for the bedrooms, bath, and kitchen.

Wicker Furniture With Weathered Gray Stain.

E. M.—Will you please give me advice in regard to the enclosed bungalow design about finish of walls and woodwork and suggestions for curtains, rugs, and furniture. The woodwork in the living and dining room will be in curly fir. Should these two rooms and entry have the same color scheme? Would you advise the use of wicker furniture in living room?

Ans.—We think the finish of the woodwork should be the same in living, dining rooms and entry. The walls can have different coloring. For curly fir in a bungalow the best finish is a soft English brown stain, though a weathered gray would also be very pretty, provided you can carry out the idea in the furnishings. Should you finish the wood work in the gray stain, then we would get some of the new Kaiser gray dining room furniture, and gray stained wicker for the living

room. We would have the living room wall tinted with a gray stain, darkening the stain with a little black for the side walls, but just as it comes for the ceilings in both rooms. Then tint side walls in dining room old blue, and have a Scotch rug with gray center and blue and green border. In the living room use a plain, deep blue rug, and plain deep blue velvet or corduroy or rep for upholstering the wicker furniture. Blue Sunfast for side hangings at the windows over thin white voile.

With "Early English" Furniture.

R. F. W.—What kind of finish shall we use for our interior? We have furniture for the living room which is Early English; we have only two pieces of dining room furniture, china cabinet and buffet, which is golden oak, of Mission or a brown weathered shade.

We had thought of using linoleum on floors and oil paper on walls of bath room and kitchen, as tile is rather expensive for bath room.

Ans.—Inasmuch as the living room furniture is Early English, it determines the stain of the woodwork in this room, which should correspond. As several different finishes make a house look patchy, we should use the same stain for the dining room, but liven up the north exposure by the golden brown walls, cream ceiling, panels, and old gold curtain draperies. The chairs can have seats of either golden brown leather or of tapestry, and this might introduce a note of rose with the golden brown.

Give the hard plaster three coats of good oil paint in both kitchen and bath room. Let the plasterer use a good coat of cement, up wainscot height in both bath room and kitchen and before it hardens mark it off like tile in grooved lines. Then paint it. Let the kitchen linoleum be brown and cream, and in the bath room, if you prefer blue and white, let wall and linoleum match. Or else have an all white wall, which is better.



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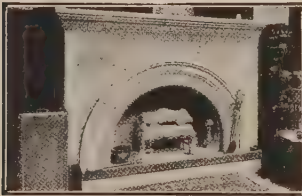
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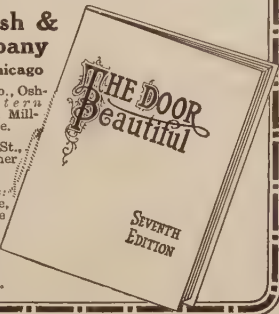
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The Bungalow Heating Problem

 In a severe climate where a complete basement is excavated and finished under the full house and all of the house is to be fully heated even in extreme weather the heating problem has been very efficiently worked out for all of the different types of heating plant.

The bungalow is essentially a form of house that clings to the ground; that spreads over a good deal of ground, with little more than the space under the roof utilized for second floor rooms and often it is all on one floor. Under such conditions a full basement adds very materially to the cost. In mild climates it is not a vital necessity. Summer homes naturally place themselves in the same class for they do not generally prepare for severe weather. With all of these some kind of heat is necessary, yet the householder does not need and does not wish to put in an expensive heating plant, nor one which is difficult or untidy to handle.

Fireplaces.

One always thinks first of an open fire for cool or rainy days. The fireplace itself is one of the most attractive features of the home. Nevertheless one does not often find a house which is satisfactorily heated by means of fireplaces alone. It is suggested that fireplaces are generally built as a decorative feature and are not properly constructed to give a full efficiency for the fuel consumed. The relation between the flue and the fireplace open-

ing, the placing of the damper, width of throat, etc., must all be carefully considered in its design. The California winter visitor is a little surprised to find the fireplace closed temporarily and an air-tight stove set up in front of it. One clever householder set up his air-tight stove in a closet and kept the door closed in mild weather, but when the morning was cool opened the closet door, built a fire in the stove and had a comfortable breakfast beside it.

A Tiled-in Stove.

An artist with a practical turn of mind set up a stove and tiled it in with tile which she designed and made herself, leaving a good space for the circulation of the hot air and working several open grills in the design, with doors which opened invisibly in order to take care of the stove. The porcelain stove of Holland and the Netherlands was her inspiration.

The House Heater.

The larger types of heating plant are very easily adapted to the small house. Heating the bungalow with hot water without a basement was discussed in the April Bungalow number for 1915.

This article gives some of the ways for heating the bungalow by direct radiation. There are types of the small furnace adapted especially to these conditions. One often used to find a "base burner" so placed in a living room as to heat,



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INSIDE THE HOUSE

perhaps two other rooms, dining and bedroom, and possibly with a register in the ceiling to moderate the temperature of an upstairs room. There is on the market a small cottage furnace which is built on the principle of the "base burner" but which is installed under the floor of the living room, with a large register directly over it in the living room floor. This brings the heat in the room at the same place and to the same amount as with the burner, but with coal and ashes and attendance in the basement. This register is divided into a central heat outlet, and two outer return air inlets. The two return air inlets are connected to outer spaces in the body of the furnace, and through these spaces the cooler air of the rooms is drawn, down to the bottom of the heater, where it is deflected upward, passing against the welded steel

radiator of the furnace, absorbing its heat, which is delivered into the rooms through the central opening of the register face. The circulation is rapid and complete, and reaches all parts of the house which communicate with the rooms where the register is placed. The chill of upper rooms is taken off by the use of floor register openings through the ceilings, into the heated rooms below.

Upon inquiry we learn that it would be possible, in case the partitions were so adjusted, to replace the large register by two or even three registers in separate rooms which adjoin, the furnace standing under the point adjoining.

With any installation of hot air, registers should be so placed that vertical pipes run directly from the furnace to the registers.

It is calculated that the ordinary seepage of air into a room from the outside, through joints about windows and doors, the usual opening of outside doors, etc., changes the air completely every hour in the ordinary room, but that unless it is kept in motion it will quickly stagnate forming a "blanket" about the people and giving all the ill effects of bad air. Thus the office of ventilation is not only bringing a sufficient quantity of good air into the room but it must also insure a circulation of the air.

A room heater, with a complete circulation of air, fresh air intake and ventilation, which has been developed for heating single room schools, is applicable to the bungalow without a basement, if it is planned for the installation. This would require a central inside room about six feet square, where this heater can be installed. The floor area of the several rooms surrounding this central inclosure as figured for the installation, would not be greater than that of a large, single room school, for which the heater was planned. Open grills in the walls communicating with each of the rooms allow a full circulation of air and heat.

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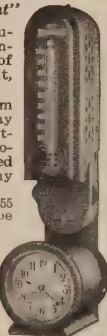
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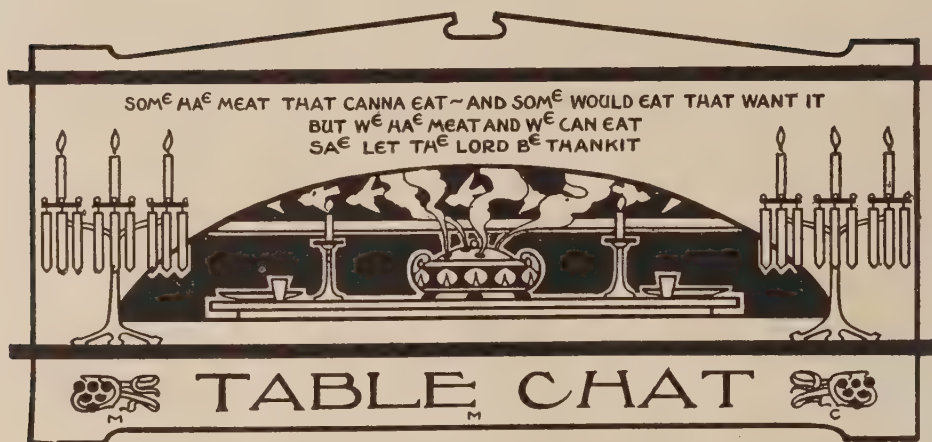
It is always the most economical and most satisfactory in the end.

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LOOK FOR THE BLUE CENTER-TRADE-MARKED



A Few Leaves of Lettuce.



EVER throw away lettuce, especially in the cold months, when it is at its best, and most expensive. If there is not enough of it for a serving, to help out someone's lunch, use the leaves for a garnish. At French restaurants an omelet makes its appearance with its vivid yellow contrasted with the tender green of a couple of lettuce leaves, and a single leaf is enough to hold a portion of salad.

Or, you can take your half dozen leaves of lettuce and cut them into narrow strips with the scissors and mix them with dice of celery and stoned olives and have a good and pretty salad, with either mayonnaise or French dressing.



To serve chicken salad with bread.

If the coarser outside leaves are carefully washed and trimmed and allowed to accumulate from day to day, tied up in cheesecloth next the ice, they can be used for a cream of lettuce soup, which is extremely pretty and tastes about like all the other cream soups made from green vegetables, whose salvation is a liberal use of milk and butter and a discreet addition of onion.

Chicken Salad in Crescent Basket.

An unusual way of serving salad is shown in the illustration. To prepare take one well boiled chicken, two bunches of celery, and two hard boiled eggs. Remove the skin from the chicken and cut the meat in small pieces, with scissors; cut celery and chop the eggs and mix all together. Add pepper, salt and a dash of cayenne. Make baskets of bread, hollowing them out and making a handle for them. Decorate with crescents or any design suggested by the occasion. The design is made with a brush dipped in yellow vegetable coloring. Fill the baskets with salad, and on top put a spoonful of dressing that has had a cup of stiffly beaten cream added to it.

Brown Earthen Custard Cups.

One of the things you get at the five and ten cent store is an earthenware custard cup, which costs five cents, and is out of the question for a self-respecting custard. It is, however, invaluable for the cooking and serving of entrées. Anything that you would serve in timbales

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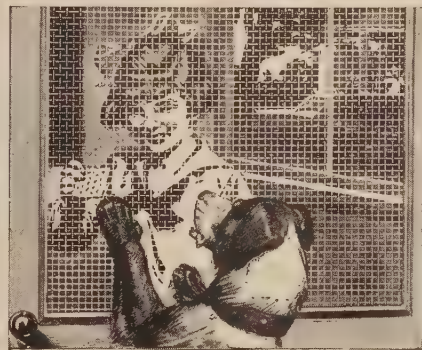
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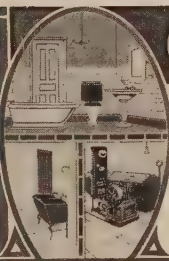
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COMPLETE & COMPACT

You are assured a square deal in Keith's.

you can serve in these little bowls, which are better than ramekins for everyday use, because they hold more.

In our illustration they have been used for minced chicken and spaghetti, moistened with a cream sauce and browned in the oven, but any number of things suggest themselves. There are baked beans, heated over for luncheon, creamed smoked beef, cheese fondu, tiny omelets of a single egg, Brussels sprouts in drawn butter, clams devilled with green peppers, even corned beef hash. They are also available for moulds for jellies or blanc mange, or for the baking of popovers or steaming of brown bread. And not the least of their advantages is that they keep the food so very hot.



Another use for earthen cups.

Making a Fish Salad.

A fish salad is an extremely good dish for luncheon or for a Sunday night supper. Arrange a circle of the inner white leaves of a head of lettuce around the edge of a platter, and cut the remaining leaves into shreds with scissors. Have an equal quantity of flaked fish, mix it with the shredded lettuce and dust lightly with pepper and salt. Just before serving mix well with mayonnaise made with lemon juice instead of vinegar. Garnish the salad with hard boiled eggs and cucumber pickles thinly sliced, and put some more mayonnaise on top of the mound.

Another way of making a fish salad is to take about a cupful of the water in which the fish was cooked, flavor it with pepper and salt and the juice of a small

onion and add the juice of a lemon. Have a quarter of an ounce of gelatine soaked in a little cold water and when the flavored fish stock is boiling hot stir it in. Pour a thin layer of the liquid jelly into a small mould, and when it begins to set arrange boiled fish in good sized flakes, hard boiled eggs and thin slices of cucumber symmetrically inside the mould, filling up with the remainder of the gelatine mixture. When it is quite hard cut the jelly in slices and arrange it on a bed of lettuce leaves.

Salad Forks and Spoons.

People who still have a fancy for dressing a lettuce salad on the table like the wooden forks and spoons, which are still made in Switzerland and have carvings on the handles of fruits and flowers in high relief. Quite an elaborate pair can be bought for eighty-five cents. A big bowl of lettuce flanked by fork and spoon and oil and vinegar cruets, with a carved wooden bread board at the other end of the table, bearing a loaf of brown or whole wheat bread, unsalted butter and olives is a luncheon that appeals at once to the eye and the taste.

The Two Grades of Olive Oil.

Whoever has read much about the olive-raising countries knows that the olives are pressed twice. From the first pressing results the very clear, light colored, virgin oil, from the second a darker colored and stronger flavored oil, which the peasants use. To any one who really cares for the distinctive taste of the oil, the second is as good, if not better, than the first. It is usually sold in bulk in shops in the Italian quarters in our cities, and is much cheaper than the other, costing little more than cotton seed oil. At forty cents a quart, frying in oil need not be considered out of the question.

In using an expensive brand an economy with oil is to get a quart and to mix it with an equal quantity of cotton seed oil, the flavor of the olive oil being strong enough to kill that of the other, which is, of course, perfectly wholesome. Indeed, there is a brand of cotton seed oil which is absolutely free from the cotton seed taste, and makes an excellent mayonnaise.

INTERIORS BEAUTIFUL

200 VIEWS



IN planning the new home or in the remodeling or decorating of the old one, the interior treatment, both as to architectural detail and decoration and furnishing, is very important. Correct expression of decorative schemes is a difficult matter for the average person to handle. In view of this, we have published in "INTERIORS BEAUTIFUL" two hundred selected views of the interiors of successfully planned and decorated homes and give, in the captions under the illustrations, the scheme of decoration used.

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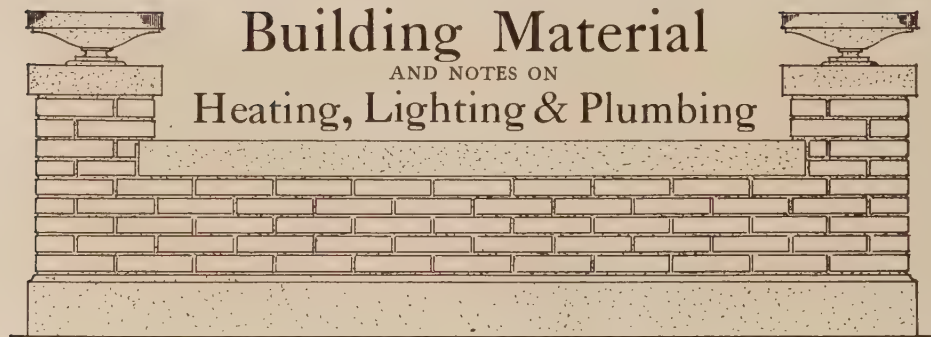


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Mixing Paints

John Upton



WHEN you get ready to paint you will want to know something about how much paint you will need, and perhaps something about mixing it. You may form a close estimate of the amount required for each coat by multiplying the distance around the building by its height. Then divide the number of square feet by five hundred for first coat on new work, and by six hundred for other work.

The number of coats needed will depend on the surface to be painted. New work will need a priming coat of thin paint and one or two others. Old work may need one or two coats.

If you use a ready mixed paint you can add enough oil to that used for the first coat so as to thin it sufficiently. One gallon of oil to a gallon of paint will usually be about right. For the first coat on old work, one-half as much oil may be enough.

Color.

It may be that you have picked out a mixed paint of some shade which you intend to use for the finish coat, after using white lead and oil for the priming coat. Or, you may decide to use white lead for the body and a ready mixed colored paint for the trim. A small amount of the colored paint, say one part in ten, may be mixed with the white to give a slight tint to the body.

Perhaps you wish to use white lead for the entire job, and may wish to color it.

This should be done by adding colors ground in oil, as better results are obtained than with the dry powders.

In mixing paint it is well to be sure to mix enough as any which remains may be used somewhere else and it is much better to have some left than to be obliged to stop and mix more. This is especially true in using colored or tinted paint as it might take some time to secure just the desired tint in a small quantity. If you have a little of two or more colors left you may combine them and put in a little lamp black and use for porch floors, eave troughs or roof gutters.

New Work—Priming Coat.

To mix white lead for priming coat on new work use these proportions:

One hundred pounds of white lead.
Six to seven gallons of raw linseed oil.
One gallon of turpentine.
One pint of drier.

This will make ten gallons of paint which will cover five thousand to five thousand five hundred square feet at one coat. If less is required reduce the amount accordingly.

For soft woods as white pine, poplar, and basswood, use the larger quantity of oil. For yellow pine, spruce and hemlock, use less oil.

The priming coat should be thin and well brushed out.

What Paint

shall I buy, is sometimes asked, to be sure that it contains

Dutch Boy White Lead

It can't be done. You buy Dutch Boy White Lead in steel keg (as shown here).

The painter makes paint of it by adding linseed oil and color.

That is the paint which wears.
Ask us for Paint Tips No. K.E.

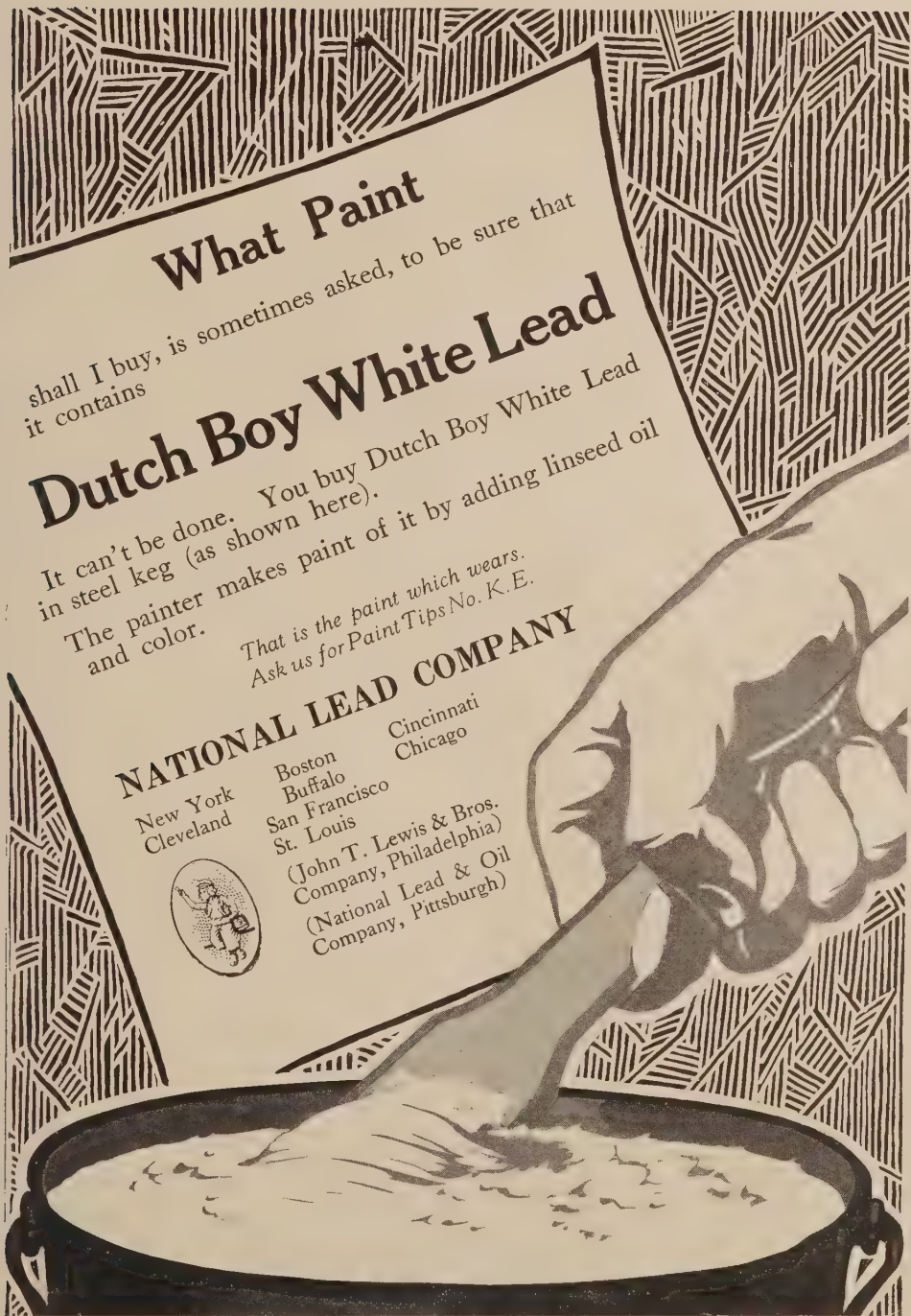
NATIONAL LEAD COMPANY

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Company, Philadelphia)
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Company, Pittsburgh)



Trade at home and prosperity takes no vacation.

Second Coat.

For the second coat on new work use:

One hundred pounds white lead.
Four gallons of oil.
One to two quarts of turpentine.
One pint of drier.

This makes about seven gallons of paint which will cover about four thousand square feet of surface.

Third Coat.

For the third coat:

One hundred pounds of white lead.
Four gallons of oil.
One to two pints of turpentine.
One pint of drier.

This makes seven gallons. It will cover four thousand two hundred feet and it will not sink into the wood as much as the second coat.

Repainting.

To repaint old work the first coat should be made about the same as the second coat for new work except that more turpentine should be used, as much as one gallon to the hundred pounds of lead. This is partly to soften the old paint so that the new can form a bond with it. A little more oil may be needed also as the old paint will be more dry and dusty than new work.

The second coat for old work should be the same as that given for the third coat on new work.

Mixing.

To break up white lead quickly, easily and smoothly, begin by adding a very small quantity of oil, not more than one pint of oil to one hundred pounds of white lead, with a good strong, smooth paddle, work this oil completely into the lead, then add another pint of oil. When this is thoroughly worked in you may add additional oil, one quart at a time, working it well into the lead each time, until you have worked in about one and one-half gallons of oil to the hundred pounds of lead. In breaking smaller quantities of lead, reduce the quantity of oil in proportion. This will make the lead into a workable paste.

The tinting colors should be thinned by the addition of oil, then they may be added to this paste and well mixed.

Drier should also be added before the

final thinning or owing to its not being thoroughly mixed in, the paint may dry in streaks.

Next add the remainder of the oil and last put in the turpentine; stir thoroughly as each ingredient is added.

The order of mixing is important. The chief thing that makes lead and oil paint durable is the close union between the lead and the oil. If the turpentine is added before these are thoroughly mixed it tends to prevent this union. If the lead is thinned too much before the coloring matter is added the paint will be apt to be streaked.

The paint will work better if the lead is broken up the day before it is to be used. The color may be added then also. The drier, the remainder of the oil and the turpentine should not be put in till you are ready to begin work. It is well to strain paint through cheese cloth or a wire strainer as this will guard against lumps and consequent streaks. Paint also spreads better if strained.

When colors ground in oil are used you will need about the following quantities for each one hundred pounds of lead, to make the given tints:

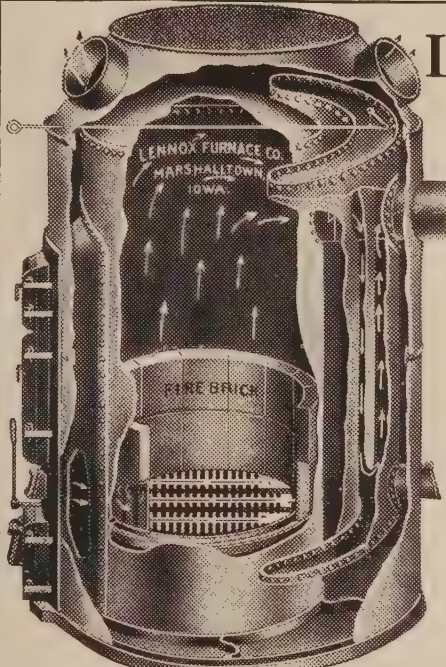
Light gray, 8 ounces lamp black.
Cream, 3 pounds French ochre.
Yellow, 2½ pounds medium chrome yellow.
Buff, 5 ounces Venetian red and five pounds French ochre.
Green, 20 pounds medium chrome green.

When a large quantity of tinting color is added to paint more oil will be needed, equal to about one-half the weight of the color added. Also more turpentine in the same proportion as the original mixture.

In adding color do not put in the required amount all at once, as colors vary in their strength and you may secure the desired shade with a less amount than you think. On the other hand, it may be necessary to use more than is called for. You can add a little at a time, until the tint pleases.

Brushes.

Perhaps the best brush for large surfaces is the round one, known as a pound brush. The smaller brushes for trimming and sash may be round or flat. Cheap brushes are not economical. They



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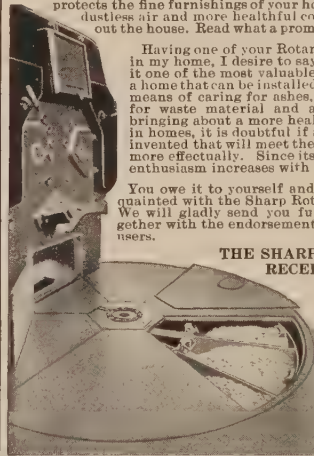
Having one of your Rotary Ash Receivers in my home, I desire to say that I consider it one of the most valuable acquisitions to a home that can be installed. As an effective means of caring for ashes, as a receptacle for waste material and as a method of bringing about a more healthful condition in homes, it is doubtful if anything can be invented that will meet these requirements more effectually. Since its installation my enthusiasm increases with its use.

You owe it to yourself and family to get acquainted with the Sharp Rotary Ash Receiver. We will gladly send you full particulars together with the endorsement of many satisfied users.

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will waste time and paint. They may shed bristles enough to mar the job.

Note: The articles of this series are prepared by a practical painter from his own experience and it may be noted that the proportions which he gives vary from those laid down by the manufacturers in that they contain more oil and not so much turpentine, but with a slightly larger percentage of the two combined.

A manufacturer's note says: "The painter may exercise his own discretion in using a larger or smaller quantity of oil according to whether the wood is oil absorbing, as white pine, poplar and basswood, or less permeable, as yellow pine, cypress, spruce and hemlock. The painter may, in rare cases, find it advisable to increase the quantity of turpentine, as in southern exposures, to prevent blistering. Where this is done a corresponding decrease shall be made in the specified amount of linseed oil. If the wood is very resinous, prepare it for priming by brushing on a mixture of one pint linseed oil, one pint turpentine, one pint turpentine drier. This should be thoroughly brushed in."

Galvanized iron may be prepared for painting, by washing with a solution of chloride of copper. This deposits a thin film of copper and furnishes the necessary key. Another method is to wash with hot water containing carbonate of soda or borax. This slightly roughens the surface and removes the grease. Vinegar will do the same thing.

To prepare cement and concrete surfaces, if new, use a wash of dilute sulphuric acid, followed by strong vinegar.

Surfaces which have stood for some time will need only the vinegar. Old plastered walls which have been white-washed, should be treated with vinegar.

The Way to Lay Shingles.

Wet the shingles thoroughly twenty-four hours before laying and use 3d. zinc, copper or galvanized nails.

For one-third pitch roof lay 4½ inches to the weather.

For one-half pitch roof lay 5 inches to the weather.

On the sides of buildings lay 6 inches to the weather. Break all joints as far from the edges as possible.

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Set it up in your basement. Easy as setting up a big stove. Do it in a jiffy—no experience needed. *We pay freight and ship within 24 hours. \$100,000 money-back guaranty.*

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Trade Mark Registered **Direct to You**



Design No. 524, by Jud Yoho
Estimated cost \$2800

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JUD YOH0, THE BUNGALOW CRAFTSMAN
463 Craftsman Bldg., Seattle, Wash.



A typical little Casement Home

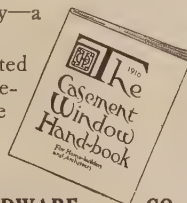
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WOODS

AND

HOW TO USE THEM



EDITOR'S NOTE.—When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH'S staff of wood experts.

This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

A Fine Timber Pergola

Monroe Wooley

PERHAPS no town in the country has a finer specimen of a natural-bark pergola than the thriving little city of Anacortes, Washington, where a leading citizen has built a pergola which has attracted much ad-

miration. He has used the materials most logical for the part of the country, and doing so has made a pergola unique of its kind.

The pergola is about seventy-five feet in length, and to support the lattice frame



A pergola showing the fine effect of the natural bark.

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are made from permanent pigments that do not fade when exposed to sunlight. They make possible a large variety of finishes, including mahogany, walnut, oak, cherry, etc.—twelve in all.

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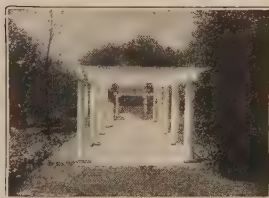
"Varnish and Varnishing"
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Patent Pending

work overhead sixteen or twenty large timbers are employed, all nearly eighteen inches in diameter and having the natural bark still on them, just as they were taken from the forest.

The huge circular pillars rest on cement abutments, rectangular in shape. Wooden blocks resting on the tops form a foundation for the heavy pergola stringers and cross beams. Many specimens of plant life have been placed at the base of each pillar, and before very long the vegetation will envelope the rustic structure, as the natural bark invites the clinging vine.

This pergola shows the fine effect of the natural treatment of logs retaining the bark. The arrangement of the overhead beam work is rather unusual and quite noteworthy. In the long vista of the pergola proper the perspective is enhanced by the dropping of the beams as they recede. The end section at the farther end of the pergola spreads in a "T" shape, and the pillars of this section are lower in height than the others, each section being raised by the thickness of the beam. This change of level breaks the long lines in a very interesting way, either in looking through the pergola or in viewing it from the outside.

The Preservation of Logs.

In building with logs a first necessity is a proper treatment of the log to prevent its being attacked by dry rot, and to insure its preservation. It is an accepted fact that log buildings can be so constructed that logs will remain unaffected by decay for an indefinite period of time, and that such construction does not involve any serious problems, nor is it a matter of great expense. When great logs covered with bark are placed on end on moist concrete footings, without any protection to the log and tightly capped at the upper end, immediate decay is invited, as such conditions effectually prevent seasoning. The treatment for preservation of logs is not new for, such a

treatment, invented in 1840, is still in practice, and considered both effectual and inexpensive.

The Passing of the Chestnut.

Reports state that the chestnut blight has now swept through the northeastern states, and that by every indication it will sweep the entire country where the chestnut is indigenous. No cure has been found for it, and the only prevention suggested is the cutting of wide areas over which it may not pass.

The situation causes wide spread dismay in the regions of the chestnut. The question now is whether we shall have diseased and scrubby chestnut woods, or whether we shall clear them out and make forests of other species. Professor Toumey, of the Yale Forest School, takes the latter view,



An interesting vista.

and it is probably the only practicable one. He would change over the chestnut stands or woods to other hardwoods or to softwoods of pine or spruce. Already an experiment of this kind has been made at New Haven.

Tests of the Fire-resisting Qualities of Wood.

Wood, like paper, is highly inflammable, when it is in thin pieces, yet is very slow to burn when it is in large timbers. Some experiments have just been made in Seattle, Washington, to test the



Majestic



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The Sanitary Way to Keep Garbage

It is buried in the ground close to the kitchen. Only top and cover is exposed, is convenient but never unsightly. It is water tight—snow and frost proof—emits no foul odors and keeps away flies, mice, dogs and cats. Always closed, can easily lift out for emptying. Dumping door opens with foot lever, closes itself.

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It prevents your house, lawn, walk, flowers and shrubs from being littered up and ruined with coal dust and stray lumps. A glass door serves as a window, when coal is not being received. It locks from inside and is absolutely burglar proof. Can be put in already built home or built into a new one.

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which you intend to build next Spring will need the soft, artistic tones of

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Cabot's Stucco Stains—for Cement Houses.



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Sidney Lovell, Architect, Chicago, Ill.

slow-burning qualities of solid wood, and to compare it with metal covered boards. A small structure, 4 by 8 feet and 6 feet high, was built with three sides of 3-inch material, the fourth side was built of $\frac{7}{8}$ -inch shiplap, over which galvanized iron was nailed on the inside. All of the lumber used had been cut a comparatively short time.

Draft had been arranged and a large supply of light wood placed inside and the fire started. At the end of three-quarters of an hour when the fire was extinguished, the three-inch lumber was found to be charred to an average depth of three-quarters of an inch, while the shiplap, which had been covered with the galvanized iron had been completely consumed. The three-quarters of an hour of burning had not sufficed to completely heat the outside of the three-inch timbers. It seemed that the metal covering had served to absorb the heat, and perhaps had aided the combustion of the shiplap. This bears out the assumption that a heavy timber construction is a slow burning construction.

Scientific Investigations.

In a report published by the Forest Products Federation, submitted by J. Norman Jensen, C. E., he says: "It would seem at first glance that there is nothing in common between scientific investigation and comparative cost of building materials. The size of a joist to be used on any job depends on scientific facts. The lumbermen sometimes feel that in their contact with public officials they do not receive that consideration which is due them. They do not understand that what those officials desire is scientific facts as to the strength of lumber, not mere opinions."

"There are some problems that can best be solved by engineers of broad training and experience. These men understand how most economically to design for any given condition, and could advise accordingly."

"When the information on lumber is available it could be published in an attractive booklet, and freely circulated."

Among the recommendations which he makes are these: "Obtain more information concerning lumber. Collect such information as will show the adaptability of lumber for various purposes, and the merits and defects of various kinds." "Conduct tests to determine the strength of each kind of lumber.—The literature on this subject is scattered." "Brand lumber. Some method of identification of the kind of lumber must be adopted. Some method of guaranteeing the strength of any stick in any shipment must be evolved." "Conduct tests to determine ways of making lumber more fire resisting."

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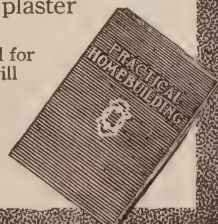
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Stays-flat—and is practically indestructible. Laying is cheap and simple, and it requires but one coat of paint for general use. It is attractive, neat and clean—and the easiest roofing to keep clean because you can sluice it with water.

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LEGISLATION

Public Resources.



HIS country is still laying foundations which shall help or hamper coming generations. Undeveloped public resources are the latent equipment of future prosperity, and to no one is this fact of more importance than to the home builder. The accompanying letter from Mr. Gifford Pinchot, is self-explanatory:

"I write to ask your help to defeat a most serious attack on our public resources. Since the fight over the Alaska resources was won there has not been so pressing a threat against the Conservation policy as the present effort in Congress to give our public water powers for nothing into monopolistic control.

"The Shields bill, now before the Senate, gives to the power interests without compensation the use of water power on navigable streams. The amount of water power these streams will supply is larger by far than all the power of every kind now in use in the United States. It pretends to, but does not, enable the people to take back their own property at the end of fifty years, for in order to do so under the bill, the Government would have to pay the unearned increment, and to take over whole lighting systems of cities and whole manufacturing plants. Private corporations are authorized to seize upon any land, private or public, they choose to condemn.

"Bills which gave away public water powers without due compensation were vetoed by President Roosevelt and President Taft. The Shields bill would do precisely the same thing today.

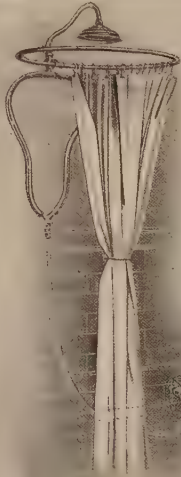
"Another water power bill, the Ferris bill, relating to the public lands and national forests, was in the main a good bill as it passed the House. As reported to the Senate, it encourages monopoly by permitting a corporation to take as many public water power sites as it may please. Under it the corporations could not even be kept from fastening upon the Grand Canyon, the greatest natural wonder of this continent. This bill takes the care

of water powers on national forests from the experienced and competent Forest Service, and gives it to the Interior Department, thus entailing duplication and needless expense.

"In my opinion, there is undue carelessness as to the disposal of public resources at present in Washington. The water power legislation now before the Senate is too favorable to the men who, as Secretary Houston's admirable recent report shows, control through 18 corporations more than one-half of the total water power used in public service throughout the United States. The water power men charge that conservation hampers development. The Houston report shows, on the contrary, that the most rapid development is in the national forests, where conservation is best enforced. On the other hand, 120 public service corporations own and are holding undeveloped and out of use an amount of water power equal to four-fifths of all there is developed and in use by all the public service corporations in the whole United States.

"Natural resources lie at the foundation of all preparedness, whether for peace or for war. No plan for national defense can be effective unless it provides for adequate public control of all the raw materials out of which the defensive strength of a nation is made. Of these raw materials water power is the most essential, because without electricity generated from water power we can not manufacture nitrates, and nitrates are the basis of gunpowder. We have no great natural deposits of nitrates.

"A concerted movement is on foot to break down the conservation policy. Feeble resistance or none at all is being made by official Washington. Unless the press and the people come to the rescue, the power interests are likely to win. This is a public matter wholly removed from political partisanship. For nearly ten years this fight for the public water powers has gone on. We ought not to lose it now."



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one of the several Wolff models, will add an invigorating zest to the bath that will be a source of keen satisfaction throughout all the years it will be used. Wolff Showers, in common with other Wolff fixtures, are extra full value for the money. May be added to your initial bath equipment with little increase of cost, or at any time after fixtures have been installed.

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and let appropriate fixtures be a part of your building plans. Wolff fixtures have long been known for their high standard of quality and are easily obtainable anywhere. Your plumber has our complete catalogue and will be glad to furnish them.

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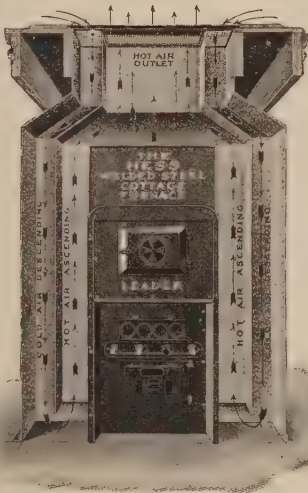
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Makers also, of White Steel Medicine Cabinets.

SPLINTERS AND SHAVINGS

Protecting the Birds.



LOUISIANA has inaugurated a wise and far-seeing policy in establishing bird refuges for all manner of bird life. These reserves lie for the most part in the low country along the coast, west of the Mississippi, a region mostly uninhabitable by man. Some three hundred thousand acres of game preserves and wild life refuges have been established. In an article on Bird Refuges of Louisiana in Scribner's Magazine, Mr. Roosevelt tells something of the work being done.

"The Audubon society, which has done more than any other single agency in creating and fostering an enlightened public sentiment for the preservation of our useful and attractive birds, is a purely voluntary organization, consisting of men and women who in these matters look farther ahead than their fellows, and who have the precious gift of sympathetic imagination, so that they are able to see, and to wish to preserve for their children's children, the beauty and wonder of nature."

It was the Audubon society which started the movement for the establishment of bird refuges. The society now protects and polices about a hundred of these refuges, which are worthless unless protected. The game warden and his boat are two of the chief obstacles in the way of the poachers, the plume-hunters and eggers, who always threaten these bird sanctuaries. The beautiful snow-white lesser egret, which had been almost exterminated by the plume hunters, flourishes in the protection of these reserves. The greater egret and Louisiana herons are found in other parts of the protected regions.

The State Conservation Commission was founded in 1912 and has accomplished results along many different lines. The work of reforestation has begun; "work which will turn lumbering into a permanent Louisiana industry by making

lumber a permanent crop asset, like corn or wheat, only taking longer to mature—an asset which it is equally important not to destroy."

"The Audubon societies and similar organizations are doing a great work for the future of our country. Birds should be saved because of utilitarian reasons; and moreover, they should be saved because of reasons unconnected with any return in dollars and cents. A grove of giant redwoods or sequoias should be kept just as we would keep a great and beautiful cathedral. The extermination of the passenger-pigeon meant that mankind was just so much poorer; exactly as in the case of the destruction of the cathedral at Rheims. To lose the chance to see frigate-birds soaring in circles above the storm, or a file of pelicans winging their way home across the crimson afterglow of the sunset, or a myriad terns flashing in the bright light of midday as they hover in a shifting maze above the beach—why, the loss is like the loss of a gallery of the masterpieces of the artists of old time."

Progress, Prosperity and Helpfulness.

Prosperity, according to the dictionary, is successful progress. Purely material progression exists only during periods of prosperity. Real reforms are born in times of depression and it is in the process of revolution that true and lasting progress lies.

Progress, in its finest sense, is the striving toward ideal completeness or perfection, while prosperity is only in the nature of thriving—an advance in pursuit of anything desirable. The latter is materialistic, the former idealistic.

The condition of prosperity in this country today is one of true progress because its basis is fundamentally sound. It had its inception in external affairs, its growth and development in thriving domestic affairs. Bank clearings are breaking all previous records, exports are reaching new high marks as one month

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¶ The dealer sent us an order for a carload of Hudson Shingles. In loading the car, some boxes that had not been stamped with our Hudson trade-mark were included. The dealer did not notice it and sold 100 boxes of Hudson Shingles to the customer, which were delivered upon receipt of the car. The customer immediately 'phoned the dealer and said, 'I bought 'Hudson Shingles,' the kind all my neighbors use and recommend, and you can't palm off any of that stuff on me.'

¶ Fortunately, most of the car was branded Hudson, so the dealer took back the 100 boxes that were unlabeled—and delivered boxes branded Hudson, and the customer was satisfied.

¶ Write your name in the coupon below, and we will send you samples of Hudson Shingles, the kind that the people want, and copy of our book—"Shingling & Roofing"—free, postpaid.



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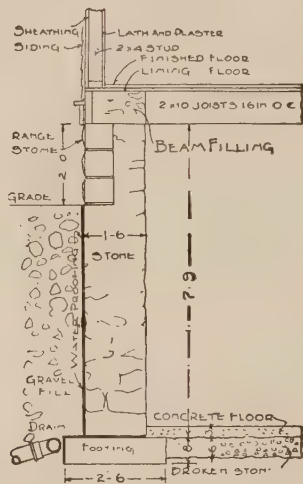
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A Handbook Every Home-Builder Should Have



(Fig. 6)
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See that your home is built right. Look after the construction yourself, and with this book to guide you, faulty work will be detected and you can accomplish more and better results.

Revised Edition
Price, One Dollar

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follows another, crops were most bountiful, bond sales are the heaviest in years, and the hammer of the builder is ringing more merrily than for some time past. There have been consistent gains in building permits for months. Property owners, who have been waiting through several long, lean years for the return of normal conditions, are now encouraged to proceed with their building operations. This is true, not only of the individual owner ready to engage in the erection of a country home or city residence, but it applies as well to banks, financial and all other extensive business organizations.

The return of prosperity means much in the way of the enhancement of the architectural beauty of our cities through the erection of these new structures.

There is no good reason why the present period of progress and prosperity should be but a flurry; it should be lasting. And it may be made so through substituting helpfulness for aggressive opposition, co-operation for competition. In the field of building, particularly, should competition and the evils attendant upon it be eliminated.—*W. J. Hoggson.*

The Painting Habit.

Last year one of the County Clubs of a southern state inaugurated a paint campaign. The papers took up the subject. The result was surprising. The beginning was not very wild, but as fast as one man painted his house another one began to be interested. Supplies of paint on hand in the local shops were exhausted and new lots had to be ordered. Painting in that county has reached the epidemic stage. Farmers who had unpainted houses a year ago have caught the contagion to such an extent that they are painting house, barn, sheds and outbuildings, and the change along the country roads is one that everybody is talking about.

One school district had an unpainted school and had planned that in the fall the school house should be painted. The painting infection caught that district and the school patrons arranged for some entertainments and oyster suppers and the school house is painted. To make it more interesting the people of the whole district are painting their houses,



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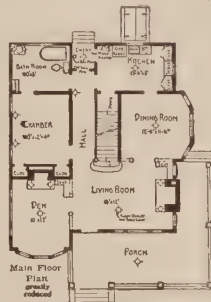
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New Booklets and Trade Notes



HE uses and beauty of concrete as a structural and as an architectural material have been set forth in a handsome booklet, "Building for the Future" by the Marquette Cement Manufacturing Company of Chicago. The half tones cover a wide range of subjects in which their product has been used and have in themselves an intrinsic interest. These include the low and wide spreading Municipal Tuberculosis Sanitarium and the Northwestern Station in Chicago and many office buildings in that city, the Ford Motor building, Minneapolis, elevators, viaducts, concrete bridges and residence work. The marginal pen and ink sketches are clever and help to place the book in an artistic rather than a commercial class.

* * *

A little book on Reinforced Concrete by Walter Loring Webb, C. E. and W. Herbert Gibson, B. S., C. E., has been issued by the American Technical Society, Chicago. This is a material the treatment of which is developing so rapidly that only the very latest book published can be entirely up to date in its treatment of the subject. The book is published in 1916; is gotten out attractively in flexible leather, pocket size, \$1.50. The subject is treated in a simple concise manner suitable for both engineers and students, or for those who wish to know at first hand something about the material which is being used so largely in their building.

* * *

Two books on Suburban Grounds and Landscape Gardening have just been issued in second editions which have a particular interest for the home builder. Both are published by John Wiley & Sons, Inc., 432 Fourth Avenue, New York.

How to Lay Out Suburban Home Grounds, by Herbert J. Kellaway, Landscape Architect, is a book of 134 pages, 6 by 9, including 41 half-tone plates and 15 plans and maps. Cloth, \$2.00 net, postpaid. Both books recognize the necessity for outdoor art in planning the home of today and are prepared for the purpose of giving assistance to those with moderate incomes who wish to secure beautiful surroundings.

Landscape Gardening as Applied to Home Decoration, by Samuel T. Maynard, has 396 pages, 5x7¼, 190 figures. Cloth, \$1.50 net.

* * *

The Room Beautiful, published by Clifford & Lawton, New York, is a very handsome volume, dedicated to the Decorative Trades, in which is presented a collection of interior views illustrating historic periods from the earliest time to the present day. "Many of the interiors are from museum photographs of

rooms to which furniture of approximate date has been added. Few good rooms are of in-voluble period styles. The English periods nearly always overlapped." The interiors are presented in a chronological order, without text.

* * *

A Plan Book which will interest the farmer and dairy man has been issued by the Loudon Machinery Company of Fairfield, Iowa. It gives information about concrete work, different suggestions in manger and gutter construction, barn farming, ventilating systems, and in fact a complete reference book on barn construction. It also gives plans for the dairy barn, combination cow and horse barns, exclusive horse barns, two round barn plans, hog barns, hay shed, chicken house and dairy ice house with illustrations of the completed buildings, giving a general index on the last page. Their General Catalog No. 43, with price list, gives a full description of the tools and barn equipment.

* * *

The Standard Pump and Engine Company of Akron, Ohio, have issued a book on Standard Pumping Units for Water Supply, which will find interest among those who are planning to install such apparatus, and which is sent on request. The advantages of a "direct connected unit" are apparent. They show several combinations of water systems. They have established standard designs of which the parts are interchangeable so that purchasers may be able to obtain repair parts at any time.

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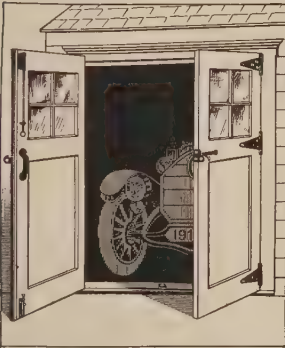
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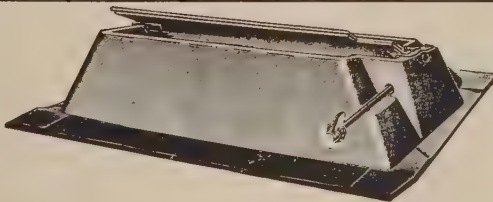
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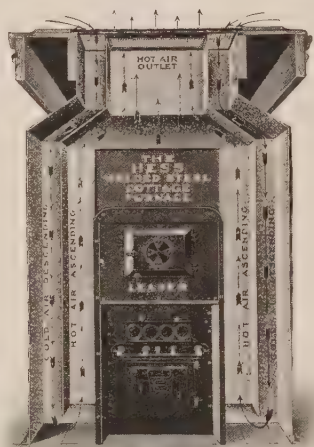
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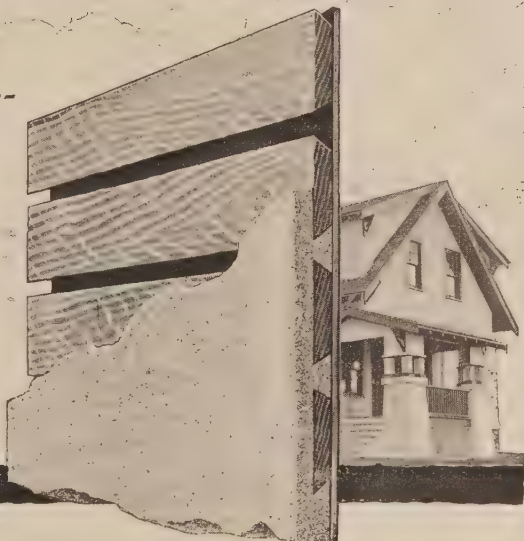
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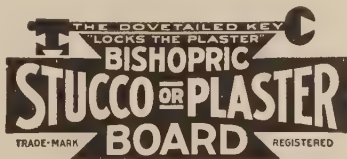
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(Continued on Page 341.)



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KEITH'S MAGAZINE

ON HOME-BUILDING

M. L. KEITH, Editor and Prop.

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Just a Word

House Facing and Sunshine.



AS the lawn had a solid coating of ice on one side of your house all winter, and the walk to the side door been always slippery and the last place to dry off with the coming of warm days? Of course it is on the north side of the house, and probably it is the service walk leading to the kitchen door. The servants, the trades people and the neighbors must put up with the ice and bad conditions while the front of the house is beautifully dry and clean.

Do you realize that the American custom of platting all streets and country roads directly with the points of the compass, and setting all buildings so as to face directly on these streets is the only possible way in which one could keep one side of the street and one side of the house, ice bound during the severe winter season? If a building is set at even a small angle, either to the east or to the west of the line marking due north, it will get some sunshine early and late in the day, and there will be no sun-less windows in the house. A street which runs at even a slight angle cannot be completely shaded by the buildings on one side, except in the "canyon districts" of the great cities,—because the sunshine will at least touch it some time during the day. Notice the streets which are laid out parallel with the river or for some natural or topographical reason, as compared with the newer district where the directions have been "corrected."

A fact of this kind emphasizes the helplessness of the individual, and the real power which is turned over to the real estate man or even the speculator who has a small tract of unplatted land, from which he wishes to get the greatest possible immediate return on his investment, and whose interest in the community and the locality ceases when that has been accomplished.

While the individual home builder may be helpless under certain conditions, he can arouse such intelligent interest, and take such steps that his children, the home builders of the coming years, may not be hampered in the same way. Or he may join with others, through improvement associations, and be able to better control his own conditions. People use foresight in their own affairs, but the mass of the people feel no responsibility with municipal problems, resting content to leave them with politicians or those who have something to gain by their manipulation. Civic pride has to be aroused.

To a certain class of home builders controlling a plot of ground, they can lay out their grounds and set their house to their own best advantage, and to them is given the possibility and healthful benefits and pleasure of having sunshine in every room in the house.

KEITH'S MAGAZINE

ON HOME BUILDING

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A charming stucco cottage.

KEITH'S MAGAZINE


VOL. XXXV

MAY, 1916

No. 5

Building a "Maryland Farmhouse"

William Draper Brinckloe

 HE Colonel's car jerks up, with crunching brakes, before the quaint little colonial office. The Colonel steps hastily down, then turns with courtly courtesy to assist out the Little Lady, and Her Husband.

"Here we are, Ma'am—this is the Architect's. Now, if you'll step this way a minute (after you, sir!) I reckon he'll be able to tell you just exactly what you want to know, ma'am. Ah, here he is; hope I see you well, sir. Allow me to introduce—"

A moment or so of formality; then the

Colonel, his back to the wide fireplace, clears his throat.

"Yes, sir, I've just been showing them some of the wonderful waterfronts of Talbot County. For awhile they rather inclined to an old farm on the Choptank; the old farmhouse with that paneled parlor, you know; but I am glad to say they have since decided to take the "Duke's Purchase" farm on the Peachblossom. How, Ma'am, perhaps you had better—"

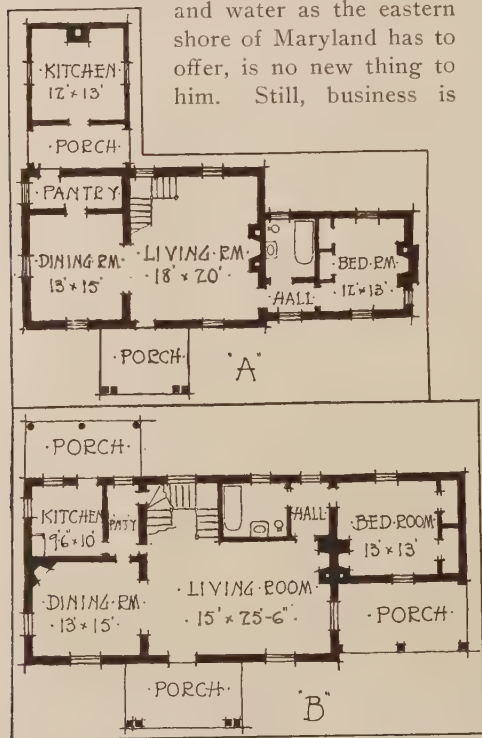
The Little Lady bubbles joyously. "Oh, we've bought just the dearest, duckiest, most wonderful farm you ever saw!



An old Maryland farmhouse.

We've been motoring around the country, looking for a place, for ever so long; but we didn't see a thing that really suited us until we came here. Oh, it's simply heavenly!"

The Architect smiles encouragingly. The incredulous delight of the city-bred folk when first they see the rare, wondrous beauty of such land and water as the eastern shore of Maryland has to offer, is no new thing to him. Still, business is



business. "Then you've bought one of our Talbot farmhouses? I congratulate you! And I suppose you'll remodel it somewhat?"

The Little Lady's brow puckers charmingly. "No-o-o; there were two of just the cutest little old brick cottages you ever saw; but the horrid men wouldn't sell either of them! I took some snapshots though. I'll show them to you and you can see for yourself,—if I can find them. Oh, here they are."

She fusses with her handbag a moment, then lays down two photographs on the drawing board.

"There! Aren't they just too dear for anything? I simply *love* those huge old chimneys; and those whitewashed bricks are perfectly stunning! Well, anyway, we've bought a place—and now we must build a house on it!"

The Architect considers a moment. "What sort of house? That is, how many rooms, and—"

"Oh, something very simple; just a sort of bungalow, you know. I really haven't thought it out exactly, for we hoped to get some nice old-timey farmhouse and fix it up."

"Exactly. Well, then, why not take one of these old cottages as a model, and plan a bungalow on the same lines?"

"Oh, *lovely*! Can we do it? You know, I thought a bungalow had to be one of those California things,—sort of Japanese-y; and I had simply set my heart on living in a real farmhouse home! But I didn't think there was any help for it."

The Architect snatches a sheet of tracing paper, and sketches rapidly a moment; laying sheet over sheet, correcting, altering, and re-drawing. "There! now, let's take this smaller house—so we'll have a big living-room taking up about two-thirds of the main house; this wing off to the right (it's the kitchen in the old house) we'll use for a bedroom, with a bath worked in, so. Now, the dining-room and pantry come over on the left; we'll put the kitchen off to the rear, with a little porch between. In winter, you can enclose this porch, you know."

The Little Lady is all excitement. "Oh, what a darling scheme? It's *most* attractive; only—let's see—will there be any good bedrooms on the second floor?"

"Well,—there will be two good-sized rooms, but I can hardly recommend them

for summer sleeping quarters. Of course, we will have a few more dormer windows, but these can't be very large, else they'll be out of scale with the rest of the design. Wait, let's mark this floor-plan 'A' and set it aside."

"What a shame! It was such a cute plan!"

"Oh, no matter; we'll try to work up something quite as interesting, and a bit

stuck off at the end of the passages?"

"Exactly; that's because of the sharp slant of the roof; and these 'passages' generally manage to shut off most of the breeze from the roof; while the gambrel roof is so much steeper in pitch that we get the window much nearer the room proper. Excuse me, I didn't mean to deliver a dry lecture! Well, now, let's see; H'm, h'm—no, that won't do! Wait, I



With white-washed brickwork and a gambrel roof.

more practical. Now, suppose we take this other photograph; it has a gambrel roof, and therefore we can get a much more liveable second-story."

"Why?"

"Because the gambrel or double-pitched roof not only increased the second-floor space very much, but makes the dormer windows much more practical. You know how ordinary dormers in an ordinary attic, seem to be set away out on the roof, when you're inside?"

"You mean they always seem to be

have it!" He makes a few quick lines on the tracing paper. "Here we are; I'll call this scheme 'B.' The main part of the old cottage seems pretty nearly right, as it is, though we may suggest a few more windows at the end. But the wing is a much later affair; we'll change it to suit, as we go along. The big living-room we'll work in to the right, at the front; that permits a bath and a good stairway to the rear. The bedroom we'll put over in the wing; and it can have a nice little private porch of its own."

The Little Lady interrupts. "But then you'll have to go through the bedrooms to get to the porch?"

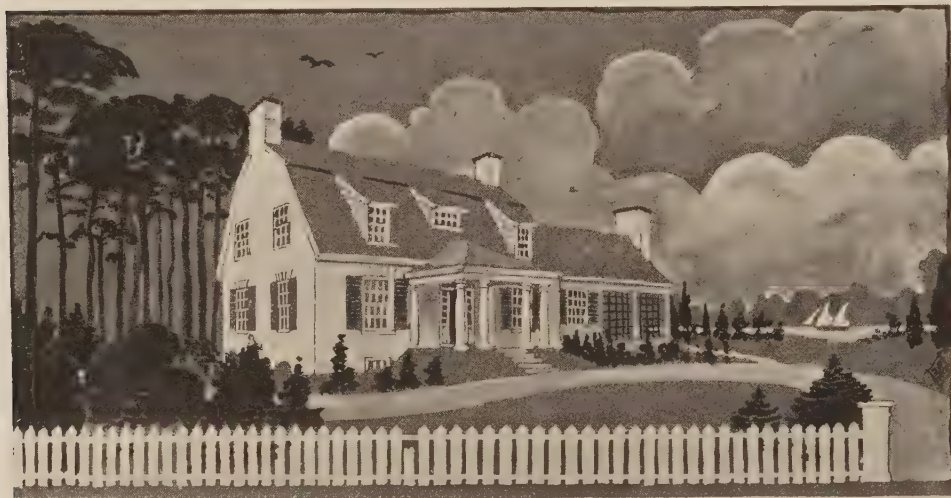
"No; we'll have a window, clear to the floor, at the end of the living-room, a French casement, or some such thing. So, now, the dining-room comes over here, to the left, with kitchen and pantry behind it, and a little back porch at the rear."

"And the second story——?"

'impossible,'—that word is merely a cloak for laziness or incompetence! Of course, we'll have to build a bit bigger; but we can keep to the same type of house, so far as externals go. Wait a moment."

Another sheet of tracing paper; a few more hasty lines.

"Here we are, scheme 'C.' A nice, wide central hall, a living-room off to the right, and two bedrooms to the left. We'll put



The new "farmhouse" for Madam. ♀

The Architect nods. "Yes, we get two good, comfortable bedrooms and a storage room; we even have space for a bathroom up there."

But the Little Lady is considering. She looks at the plan, looks away, looks back again; then turns half-hesitatingly to the Architect.

"Oh, it's all very pretty, and awfully cute; but I'm afraid I don't altogether like it. You know my baby will soon want a room of her own, and I just couldn't bear to have her sleep upstairs! I suppose it isn't possible to get another room downstairs?"

The Architect bows, laughingly. "My dear Madam, I never, under any circumstances, tell my clients that anything is

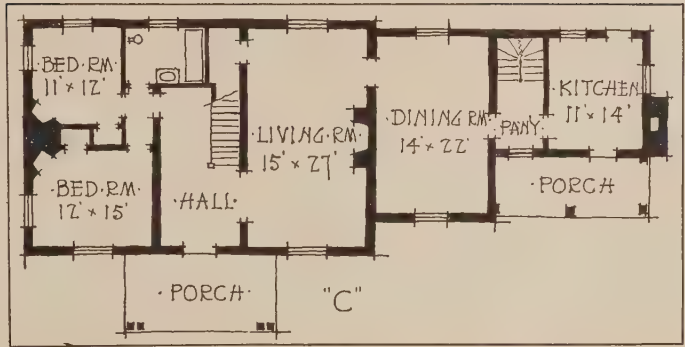
the bathroom at the rear; part of it can be extended under the stairway. The dining-room, the kitchen and the pantry, are all off in the wing; we get space for two or three fine second-story sleeping rooms, besides bath, storage, servant's room. There's a back stairs, you see; a house of this size ought to have one. How does this scheme suit you?"

"Oh, it's simply delightful! But about the outside, can you make it look real nice and old-timey, just like the old house we saw?"

The Architect laughs. "I'll try to, at any rate; come here tomorrow—no, that won't give me time enough; can you make it the day after? Very well, then; good afternoon—good afternoon!"

Again the Little Lady and her suite sit before the draughting table. She smiles up excitedly. "Well?"

The Architect turns to one of the draughtsmen. "Townsend, get out the second sketch I made yesterday—no, not that one — ah, here we are."



He lays out a sheet of drawing-paper; the Little Lady clasps her hands with a charming little squeal. "Oh, it's *wonderful!* but please explain——"

"Certainly; certainly! Well, I've tried to carry out the hospitable, homelike feeling of the Eastern Shore farmhouses. I've used good solid brickwork; no mere flimsy clapboards. The gambrel roof, you know, was quite characteristic of this section, especially in the better class of story-and-a-half farmsteads; so, too, were the so-called "Dutch" dormers that I've shown."

"I like that roof so much, it just seems to fit down, somehow," she murmurs.

"I'm so glad you like it! A gambrel roof is a dangerous piece of business, in the hands of unskilled designers; the two slants must bear just the right proportion to each other, else the roof becomes a hideous nightmare instead of a thing of beauty. Still, I'm conceited enough to think I really did design a good-looking gambrel this time.

"The windows, you'll notice, are wide, ample affairs; the little colonial panes make them look even larger. And the shutters——"

She interrupts quickly. "But do we want shutters?"

"Pardon me; I think you do. Not for practical reasons, perhaps, but for esthetic reasons you want them by all means. The green blinds will give a needed note of

color against the white brickwork——"

"White brickwork?"

"Certainly; we'll whitewash it like the old house you saw. The old Marylanders always did it; they knew that white is the only tone that harmonizes and yet contrasts with a landscape of sombre pines, bright green fields and oak-woods, and silver-blue waters. A mass of red brickwork is all well enough in town—but I don't always care for it in the country! Well, I think that's about all; I'll start on the working-drawings if you're sure the sketch suits you."

"Oh, it's just *dear*; it's *perfect*; I'm simply *crazy* about it!" gurgles the Little Lady.

"Very good!" nods Her Husband, lighting a cigarette.

"Excellent! Excellent!" applauds the Colonel. "I always contended that these modern gimcrack bungalows weren't at all the thing for this fine old locality; and I am delighted, ma'am, to see how greatly you appreciate the fine old colonial cottages of Talbot county. And now, I suppose you wish to return to the hotel? We'll join you there in the course of a few minutes. Your husband and I have a little matter of business to attend to. Good evening, ma'am! Good evening! Now, gentlemen, come up to the Yacht Club with me, I've got some old Maryland apple toddy, that's simply liquid velvet!"

Placing the Trellis

M. Roberts Conover



HE house needs the friendly caress of natural growths, a caress that gives it beauty where it is plain, shade where it is too sunny, and kindly screening. The relation of the house with its surroundings and of its family life with its immediate

nate that they made loud appeal for notice, standing for years until they disappeared under a burden of neglected vines. There have been others so satisfyingly simple as to always be a delight. Almost any old country village that has known prosperity will show us trellises



Trellises at the entrance.

out-of-doors is not only expressed in the use of vines about the house itself, but in the vine-covered out-of-door room, arbor, summer house, pergola or tea-room according to its pretensions, and a practical use of vines in such places demands some form of trellis.

Through the years that are past there have occurred various phases and forms, certain epochs in trellises influenced variously by economy, by material used and by foreign influence upon prevailing styles. There have been trellises so or-

of different periods. Old, close lattices, forbidding to vines and light resisting; trellises of wrought iron and wire, rusty and cheerless; old, decayed, wooden trellises falling to bits; and now and then in the purity of white paint a restored form of some beautiful, simple style of a past period which delights the eye. In this connection there rises before me a picture which was fact in my early childhood: an old brick farm house in its fourth generation with bricked walks, box-bordered, leading to its hospitable doors. On either

side of the porch at its main entrance was a trellis of wooden lattice through which roses clambered. Its interstices were diamond-shaped and spacious enough to be airy, and it was painted white in contrast to the cheerful warmth of the bricks. Half-way across the yard from the entrance porch intersecting the box-bordered walk was a box-bound circle within

which stood a white fan-shaped wooden trellis, and the rose that clambered over it looked very lovely. Really, that old fan-shaped trellis was decorative. Doubtless modern taste would rule that it was misplaced standing so in the center of the lawn space in its green ring of box and turning the path to left and right on its way toward the front door, yet in memory's picture, that old fan trellis looks just right as it holds for the enjoyment of the approaching guest that beautiful fragrant old rose.

Happily, the simple and beautiful lines of the old trellises are again with us, a little differently spaced, with ample rectangular spaces or with oblique bars. It is fashioned from the best of by-gone periods with modern adaptation and is architecturally appro-



White trellises on a brown shingle house.

priate to the dwellings of the present time; to the house of plaster, the house of brick or stone, and the house of wood.

The ample spacing of the modern vogue is much more friendly to roses, for it admits the light and air so essential to healthy foliage. The interstices of oblique bars are a little more favorable to the unaided ascent of vines.



A trellis over the chimney.



A porch trellis.

Iron trellises are, of course, more durable than wood, but they are not interesting in themselves and require an ample and speedy covering of vines.

The wooden trellis needs to be strongly built and braced or bracketed in its position, for though an uncovered trellis suf-

fers little from the wind, when blanketed with foliage the strain is severe in unsheltered locations.

Where a trellis is to be used against the side of a house, it is better to offset it several inches. In order to allow free passage of air to insure against damp-

ness, brackets at the top and bottom and at intermediate points are necessary. The legs of the wooden trellis should rest upon stone or concrete blocks instead of in or upon the ground.

Well-seasoned wood should be used and the cross-bars securely fastened with nails or screws. The trellis should be kept painted. White paint is by far the most attractive if the color of the house



An out-of-door room.

permits its use, and there are few color schemes which are not the better for a touch of white.

Sometimes severity of the facade of a formal type of house is very agreeably relieved by trellises at the corner extending to the height of the windows or sometimes to the cornice. The first illustration shows a very attractive treatment.

Rose-covered trellises about the rear or side entrance, on either side of windows

trellis on either side of the column as it becomes vine covered makes a background for the column, as the vine is trained not to cover too completely.

In each case it will be noticed that the trellis is nicely made of material heavy enough to carry the weight of vines likely to be dependent upon it. One beauty of the present day trellis lies in its careful design and construction. It becomes an integral part of the structure, not



A trellised pergola.

and about the verandas are very attractive on the brown shingled house with its white trimmings.

The bracketed overhang of the next house illustrated invites a trellis treatment which has been carried over the brickwork of the chimney in rather an unusual form, beside the entrance, and at the ends of the porch as well.

The stucco house with the tile roof shows a very attractive trellis treatment used in connection with a porch with cut rafter ends. The carefully constructed

merely an afterthought or built to fill an unconsidered need.

A somewhat similar treatment has been given the trellises about the classic pergola in the last illustration, making a support for vines at the sides and ends, which give a protection both from sun and wind, as well as forming a screen about the pergola.

The treatment of the out-of-door sun room is not essentially different. The vines soften the mass of the supporting corner.

Treatment of the Fireplace Tile

Anthony Woodruff

SO important in the design of a house is the treatment of the fireplace that unless it has been carefully planned to fit into the decorative scheme and general design it will tend to dominate the entire scheme or to clash with it. The very simple room with the barest essentials as to finish and woodwork which of itself is quite ordinary, unobtrusive, but in simple good taste may become a fine apartment and extremely individual by the placing of a strikingly handsome fireplace. In fact, when designing a room for a very beautiful fireplace the other parts of the interior should be subordinated, the finish being more or less unobtrusive in order not to compete with the fireplace.

Facing with tile is essentially a logical treatment for a fireplace, as its possibilities in any direction are almost limitless. Being a plastic substance in its early stages of manufacture, its shape, form, decoration, and texture of its surface are entirely within the control of the designer. In color, its possibilities are even greater because it is not desirable to control it absolutely with each piece, while yet directing it in a very definite way. A subtle quality in hand-made tile results from the fact that very seldom are two pieces absolutely identical, as is the case with the machine-made product, each piece having the individual attention of the workman.

Building materials in general and those



There is a subtle quality in hand-made tile.

used for fireplaces in particular are of two general classes: either structural, as in the case of brick or stone, where the construction is of the material itself and therefore must be governed by peculiarities and structural limitations of the material; or decorative, as with tile, wood or plaster, where it is frankly a covering material which faces the construction of a rough building material. It might be noted that while wood is, under most conditions, a structural material, about a fireplace it takes its place as a decorative or facing material. Under modern building conditions, however, this distinction is largely superficial, as there is always a finishing material, even with brick or stone.

The art of tile-making and its use goes back to very early times and through the oriental civilization, but so individual is this art that each period is in its own way distinctive. The tilemaker's craft is sensitive and his work is essentially the response to the demand for beauty in the individual surroundings, and has developed in this country under the increasing demand for beautiful homes.

Perhaps in no other direction has the handicraft movement more strongly touched modern living conditions than in the development of the possibilities of tile.

A Visit to the Batchelder Studios.

Several years ago, being much interested in some special tile work, I made my first visit to the Batchelder Studios, in

Southern California. Near the Arroyo we found a beautiful little bungalow with a big yard and a group of low buildings under the pepper trees. Here was the beginning of what has since become a unique industry. It started as a "back yard" experiment, with a portable kiln having a capacity of one hundred fifty six-inch tiles. During the first year the demand for the tiles increased to such an



An interesting treatment in color and line.

extent that a permanent factory was built, and quickly following each other, three kilns were installed, having a capacity of four thousand tiles.

In a recent visit to the bungalow by the Arroyo, the buildings were changed and the portable kiln replaced by a permanent plant on the other side of the city, and beautifully fitted downtown offices.

A distinguishing feature of this studio lies in the way the work is handled. Whether it is a fireplace or the full interior of a room, the design is worked out as a whole, rather than for the individual tile. If a fireplace is under consideration, the rest of the room, propor-

tions, exposure and lighting, and general conditions are studied and taken into account, and the fireplace as a unit is designed for these conditions; the general lines are fixed, the color scheme decided, at the same time determining the accent which is supplied by tile specially designed to give the texture of surface, form, color, or a combination of these.



The joints have value as have lead lines in glass.

The tiles are hand-wrought by processes peculiar to this factory and designed for the particular places in which they are to be used. A hand process does not work with the precision of the machine-made article. The tiles have a slight variation of shape and size—sufficient to relieve the monotony of machine-pressed tiles. These variations are not sought, Mr. Batchelder tells us, but are inevitable in a hand-made product and are at the same time desirable. "We make the very best

tile we can possibly make by hand. The work when set up produces the effect of unity rather than uniformity."

The color in the individual tile is very interesting, but when set in a sufficiently large surface to get the effect as a whole and in relation to each other, the color possibilities are practically without limit. The range of the color scheme is a revelation to those who are familiar only with the uniformly colored tile of commerce.

As in the case of old Persian rugs, the colors do not admit of positively inharmonious combinations. A single tile furnishes only a clue as to the ensemble produced by a completed piece of work. The color effects have been described as "luminous," "mellow," "glowing"; each tile is a unit in a general scheme keyed to a definite color note. When figured tiles are employed, more positive touches of color are often fired into the background areas by way of enrichment, or to catch the brighter hues to be found in curtains, hangings and rugs.

When the dominant note is red, the tones vary between light and dark, or with the warm, light tones glowing through the surface, or with a note of dull blue and green fired into the clay. They furnish a rich color scheme blending with oak or with mahogany or with the darker tones of wood or wall, and are particularly interesting with many of the darker-hued Oriental rugs.

The browns, either dark or light, may have subordinate touches of gray green, or may take a soft, mellow pink, which may be used effectively with white woodwork, or the colors may blend into grays

or into the green grays.

After the tile work is set in position it is rubbed with raw linseed oil, which leaves it with a soft, leathery finish and without disagreeable high lights.

In setting the tile the cement lines of the joints are as important in the design of the tile work as are the lead lines in the leaded glass window. The joints are from one-quarter to one-half inch in width, the pointing concave, well back below the surface of the tile to expose the rounded contours.

The color of the cement may be sought in some of the middle values of the tiles, neither too light nor too dark, and may be repeated in the color for the wall.

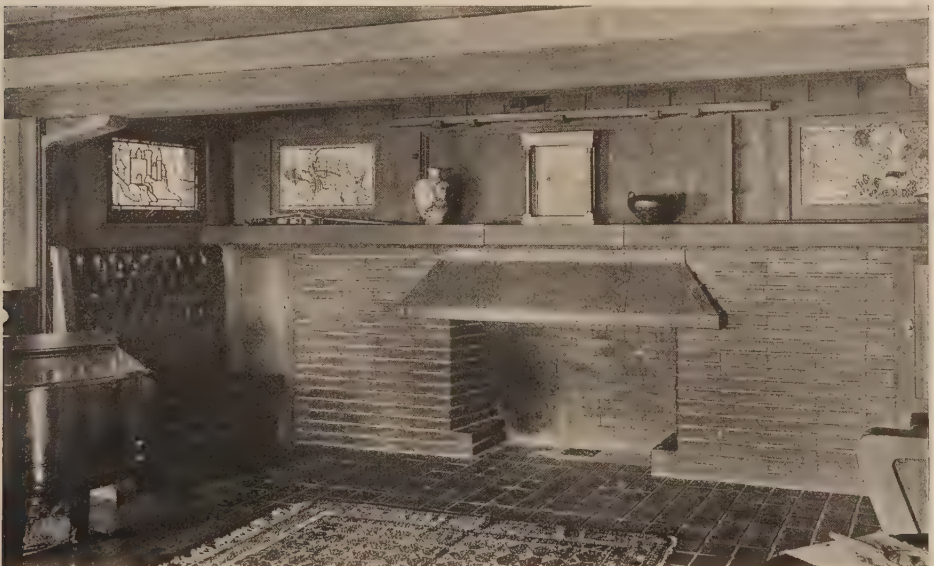
It may be noticed that in these fireplaces shown, and the recommendation is made general, that the firebox opening should not be bound with the convention-



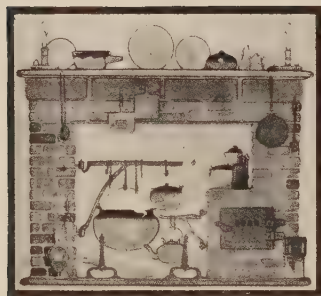
Special tile about the fire opening.

al brass ruling. It is a makeshift at best bringing in an unrelated color.

The fireplaces here shown, while only giving a few examples of this individual treatment of the fireplace design, at the same time show the possibilities of tile in the home, when it is treated as an individual material.



An ingle-nook with tile and leaded glass.



THE KITCHEN



The Problem of the Sink

Edith M. Jones

(Copyright, 1916, by Edith M. Jones)

ONE form of the hesitation waltz last year was called the "Kitchen sink." When and how the name originated is hard to say, but it enjoyed its period of popularity and was in turn replaced by different dances of other names.

Not so with the dance of the kitchen sink which women have been dancing three times a day in their kitchens for all these many years. Its vital importance has never allowed the name to change or the dance to die. The dance form has changed, however, in the last few years. Women have wakened to the fact that the dance as they have been doing it has become old-fashioned and out of date. It has an ugly, quite out-of-date stoop and double

the number of steps and motions.

Have you ever thought how much less room is required nowadays for the modern dances?

Think how much more room the old-fashioned polkas took! Why, we danced hard and furiously through long halls. Today the amusement rooms are smaller because the dancing has become less strenuous.

Just so with the "Kitchen - sink" waltz of modern housekeeping. There is a studied ease about the dance of today and less and less unnecessary motion. Smaller kitchens have done much toward simplifying the dance and modern equipment is all planned with the view of making this room attractive.

Because of the well planned equipment the



With cupboards on either side.

new dance can be done with almost no stooping motion. The sinks and working table tops are made two and three inches higher than formerly. In other words, 36 or 37 inches, instead of 32 or 34 inches, from the floor are the popular heights for the sinks, etc., around which this modern dance is performed. Gas ranges with elevated ovens make stooping unnecessary. Ice boxes are set up from the floor and drainage is provided to avoid the extra motion and care of the pan of former years. Pan closets do away with the low, storage cupboards. The new floor coverings are not alone comfortable but so easily cared for that the old-fashioned scrubbing has given place to the new-fashioned mops. The sinks are models of beauty and made of materials which are easily cared for. The gas ranges do away with the dirt and care of coal and the later ranges require no polishing. Even the house dresses which women wear to do their work in are more attractive nowadays because so much heavy work has been eliminated with the improved conditions — and so on and on we may enumerate the wonderful changes which make housekeeping an increasing joy and the "Kitchen-sink" waltz in the well-planned kitchen a real pleasure, as any dance should be. So we may say—dances come and dances go, but this daily dance of the housewife goes on steadily improving.

There are many kinds of sinks on the market today to please every fancy and pocketbook.

The porcelain enameled iron one-piece

roll-rim sink with right and left hand drains is beautiful to look at and easily kept clean. There are good looking white rubber mats of any size desired which can be used to protect the dishes when necessary. These mats can be ordered from any wholesale rubber com-



One-piece sink with double drain-boards.

pany and are quite reasonable in price.

The usefulness of a sink is doubled and dishwashing is robbed of much delay and annoyance if right and left hand drainage is provided. Few people realize at how small a cost wooden or enamel drain-boards can be installed and much efficiency obtained.

Sometimes such an arrangement as shown in the illustration, with cupboards

on either side is satisfactory. The table tops on either side of sink are covered with vitrolite and the scheme is good because there is ample drainage room and yet less wall space is required for the sink itself.

The center sink solves a good many problems and has proven itself worth while. One can readily see how this

She says her friends all say they envy her her kitchen and will take her "job any time she leaves it."

One last word about sinks. Whatever kind is chosen to meet the purse, fancy and demand, see to it that ample drain boards are provided. There is no one more important thing in the kitchen than this one of ample working surface. Con-

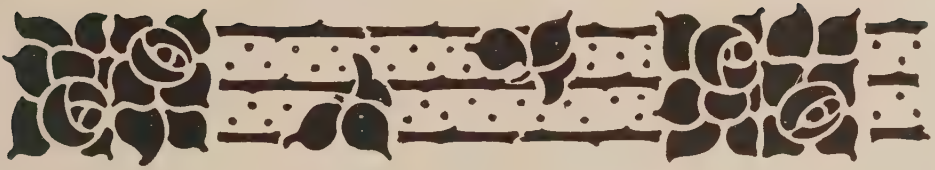


A center sink.

arrangement concentrates the equipment and saves hundreds of steps in the preparation and clearing away processes. There are several different types—more or less elaborate—which can be used, but in every home where the cook has become accustomed to the innovation it is always very popular. Recently I talked with the cook who had been in the kitchen from which this photograph is taken and she was most enthusiastic. She says she never wants any other kind of an arrangement because she can do twice the amount of work with half the time and effort.

gestion, confusion, breakage and wasted energy are all avoided in this way.

Then the placing of the sink is important. One advantage of the center sink is the light and air it has from all sides. A sink under windows is pleasant, not alone of light, but the air in one's face is often refreshing and the view restful. Above all, avoid placing the sink against a wall with the window at the back. When it is necessary to place sink on inside wall, *always* provide side light. These must be given consideration or we will find harder problems ahead of us.



The Use of the Stencil

Part II—Fabrics and Furnishings

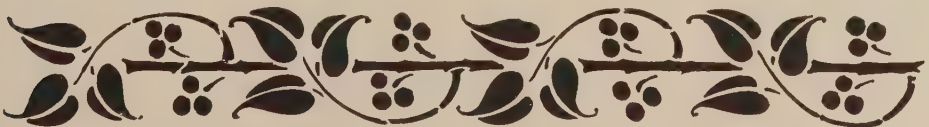
John A. Knowles



THE easiest form of decoration for the amateur to undertake and that which is most likely to be successful is stencilling. As brevity is the soul of wit so restraint is the soul of design; and happily enough the error of the amateur is not likely to be that of overdoing the ornament, as he will generally choose the simpler forms until he has more or less mastery of the subject. The flatness of effect of this form of decoration lends itself admirably to the wall design as already discussed, where any suggestion of projection would be out of place.

Besides its suitability as a means of decorating walls, stencilling has additional advantages in its applicability for ornamenting cushion covers, casement curtains and even for articles of dress, and these when they become soiled may be washed without injury as the work in this case, being done in oil paint instead of the water paint recommended for walls, is permanent. The stencils for this work can be bought for very little cost. Many firms supply packets of most beautifully cut Japanese stencils with designs of birds and flowers, which are

most admirably suited for such dainty things as doilies or table centers. Neither is there any great restriction as to the kind of material upon which stencils may be used, brown Holland, case-ment cloth, silk or satin, all take stencilling admirably, though such things as velvet and plush, as well as the coarser textured materials used for hangings, are not so suitable. The group of designs shown would work out excellently for cushion covers if the color scheme chosen be not too varied. A very good plan to avoid this and keep the colors in key with one another is to mix a tint upon which the general scheme is to be founded and then try the effect of adding a little of another color to this general tint and see how they harmonize rather than mix entirely fresh tints for each color required. As an illustration, let us suppose that we are going to stencil the first of the three designs for cushion covers and that the material bought to make the cover of is an old gold tint of satin. First, as regards materials, we shall require a couple of small stencil tools half an inch in diameter, a piece of wood, glass or tin for a palette, some oil



colors in 3-inch tubes, of which the following will do practically any color scheme required: Flake white, yellow ochre, middle chrome yellow, burnt sienna, crimson lake, Prussian and ultramarine blues and raw umber. We shall also require a 5-inch palette knife and some medium to thin the paint and make it dry, of which either hard oak varnish or mastic varnish is best. A small bottle of turpentine and some petroleum to wash the brushes out in completes the

palette. Take some more of the general tint, adding some raw umber to it. This is for the stalks. These tints will all go well together, being all modifications of the same general tint. The tint for the flowers must be mixed separately and made of white, burnt sienna and a little crimson lake. The material should be stretched and tacked down on a drawing board or table top, and the stencil pinned down upon it with thumb tacks to prevent its moving. When the stencilling



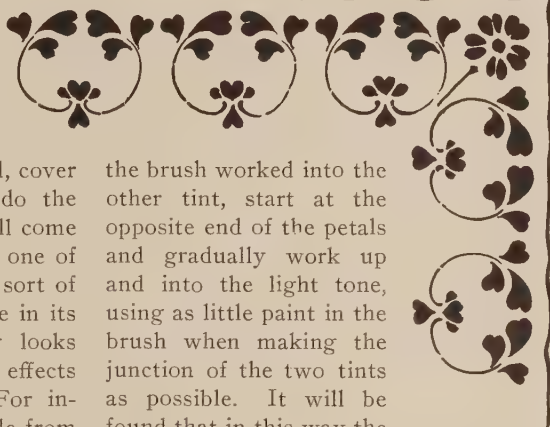
A group of designs for cushion covers.

outfit. As the color of the ground on which we have to work is old gold, and the design is a conventional treatment of a rose with stalks and leaves, a harmony of rich bronze greens and browns with brown red for the flowers would look best. The flounce or cord of the cushion could then be made a lighter yellow and the whole, when finished, would make a fine harmony of color. Mix a tint for the leaves as a beginning, consisting of flake white, a little Prussian blue and chrome yellow, and thin it with enough varnish till it is a stiff cream. Hold the palette knife dipped in this against the material and see if it harmonizes with the ground tint. If too bright add a little raw umber to "kill" it. This is for the general tint and is to be used alone for the brighter parts of the foliage. Now take some of this general tint of green and add a little Prussian blue for the darker parts of the leaves and put it on one side of the

is done it should be carefully lifted off and laid upon an old newspaper and carefully cleaned on both sides with a rag dipped in petroleum or turpentine. Remember that the stencilling tool is not brushed across the work but dabbed on with a short pounding motion. If the colors are inclined to dry bright and glossy, either use less varnish in the paint or add a little dry color of the same tint bought in powder instead of ground in oil as it is in the tubes. The material, however, generally absorbs the oil and prevents this trouble. Do not add but very little turpentine to the paint unless necessary, as this causes the oil and varnish in the paint to run and form dark grease stains around the work. Always make a trial on a piece of spare material of the same kind before doing the actual work, as this will prevent mistakes and consequent disappointment. If the design is complicated or the paper strips

which separate the different parts of the design narrow, so that the brush, in working, overlaps into the next compartment, it is better to do a part at a time, say the leaves first, and these having dried, cover them with pieces of paper and do the flowers. In this way the work will come out cleaner and sharper, which is one of the effects to be aimed at in this sort of work. Although not so applicable in its use on walls, shaded stencilling looks well on fabrics, and very charming effects can be obtained in this way. For instance, a rose can be made to shade from a delicate salmon pink at the tips of the petals to a deep pink and leaves from a light yellow to dark green. In order to do this at least two brushes will be necessary, one for the lighter and the other for the darker tones. We will suppose it is required to shade a conventional design of roses, with leaves and briars. Mix the tints for the roses first, making one of flake white, a little middle chrome yellow and a little crimson lake or vermillion, adding enough varnish to make it into a stiff cream and, if it seems too thick to work, a few drops of turpentine. This is for the light parts and is to be put on one side of the palette. Mix another tint deeper of crimson lake, very little white and a mere trace of yellow; thin as before and place on the other side of the palette. Now work a brush into each of these and, taking one first, dab the center of the rose and ends of petals required light, then, taking

the brush worked into the other tint, start at the opposite end of the petals and gradually work up and into the light tone, using as little paint in the brush when making the junction of the two tints as possible. It will be found that in this way the most delicate gradations of tint are not only possible but easy. For the leaves mix two tints, the first of middle chrome yellow, flake white and the merest trace of Prussian blue for the delicate green tips of leaves; the other of the same colors but with less white and more Prussian blue with a trace of raw umber added. The stalks make of raw umber and chrome yellow with here and there a dab or two of dark green worked in to give variety. If a stencil in course of time become torn or too frail for further use, lay it on another sheet of paper

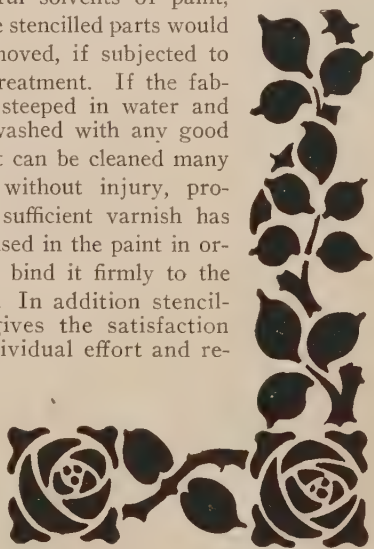
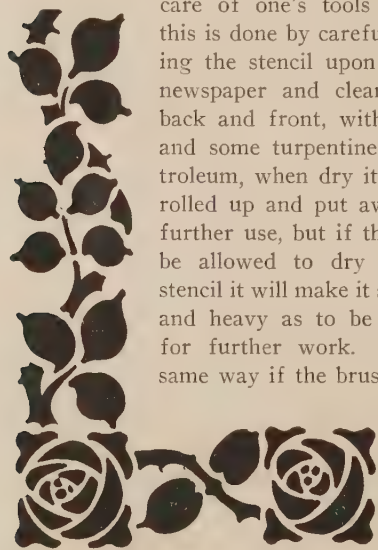


Design for table cover.

and stencil the design through with a nearly dry brush and when this is dry cut out the design as before. Some people make their stencils of tinfoil, especially where they are to be used with water paint, as this material cannot become soaked with the water like paper and become limp, but it is hardly necessary to use this for ordinary work as, unless carefully handled, tinfoil soon becomes baggy through the continual banging of the tool upon it. Parchment is a good material for stencils but expensive, and, after all, nothing is better than paper if tough and of good quality. It always pays to take

care of one's tools and if this is done by carefully laying the stencil upon an old newspaper and cleaning it, back and front, with a rag and some turpentine or petroleum, when dry it can be rolled up and put away for further use, but if the paint be allowed to dry on the stencil it will make it so thick and heavy as to be useless for further work. In the same way if the brushes are

cared for they will last a long time. If they are required to be used in the same color the day after, all that is necessary is to place them in a jar with enough water to cover the bristles, when after a good shake, they will be once more ready for use. But when finally done with they should be cleaned out in petroleum and then washed in soft soap and warm water and allowed to dry. When a fabric which has been stenciled has become soiled and it is necessary to clean it, it can be washed, but care should be taken that no soft soap, washing soda or soaps containing strong alkalis be used, as all these are powerful solvents of paint, and the stencilled parts would be removed, if subjected to such treatment. If the fabric is steeped in water and then washed with any good soap it can be cleaned many times without injury, provided sufficient varnish has been used in the paint in order to bind it firmly to the fabric. In addition stenciling gives the satisfaction of individual effort and results.



What Will Grow Under Trees.

Many people ask, "What can I have under trees where grass will not grow?"

Of the usual shade trees, elms and silver maples are notoriously ravenous, and no ground cover of year-round beauty, so far as I know, will thrive permanently under them without occasional watering and liberal use of commercial fertilizers. The trailing myrtle is generally considered the best ground-cover under trees because it has evergreen foliage and its waxy blue flowers appear with the first violets, bloom with profusion in May, and give scattering flowers all summer and autumn. It is also hardy, more so than English ivy.

It is a misfortune when specimen evergreens lose their lower branches. The fallen needles are supposed to be responsible for killing the grass under evergreen trees. I know of attractive ground-covers of lily-of-the-valley under pines and other trees. Lily-of-the-valley has a certain decorative quality, and is very attractive, especially when in bloom. The only drawback is that it has no winter beauty. English ivy seems to me the ideal ground cover under trees wherever it will thrive without winter protection.—*F. H. Sweet.*

The Practical House

Ellis R. Warner

A Building Experience by One of Keith's Readers



IN the building of a house, the greatest consideration is expense. If you are planning to build, plan and put up a cheap house—but do not mistake the meaning of cheap. The cheapest article is the one that gives the greatest value in return for the price which is paid for it, whether it be soap or shingles. Construct a building that will return not only one hundred cents for every dollar invested but also at least six per cent interest in comfort, convenience and attractiveness. If you cannot do this, you better put your money in the bank and rent a house.

This, however, can be done if the use for which the building is designed be carefully considered, and the house built accordingly.

Before starting the foundations of this house, which will mean so much to you, be sure that you have on hand these two things: an exact knowledge of what you want, and an infinite supply of patience. What will you have gained by building your home if when finished the home is unsatisfactory? Do not depend on good luck and the carpenter getting you what you want. If you do you will be disappointed. Get it yourself and then you will



Red asbestos shingles add a distinctive touch.



In living room.

be sure of it. But all this requires patience, and patience you must have first, last, and all the time.

The home shown was planned and built by a man with a small family and a small

income, at a cost of twenty-eight hundred dollars. It was intended for a home, not just a house, and therefore was made to last a lifetime and never look shabby. It is large enough to be comfortable and not so large that it is difficult to find tenants to occupy it if the owner is compelled to be away for some time. It is essentially a cheap house.

In regard to expense, the initial cost is not the only item; repairs of all kinds must be reckoned on. For this reason many of the new buildings that are being put up are of stucco, as is this, since it combines the good qualities of the brick and the frame houses in a cheap, substantial material that needs no repairs. The red asbestos shingles not only make the place attractive and a trifle distinctive, but also furnish a covering that is equally impervious to fire and water. The long roof line, broken by the dormer windows, gives a low appearance to the house which the wide pillared porch helps to emphasize.

Do not think that a house that is inconvenient to work in is a cheap house. Your wife will enlighten you if you make that mistake. Pay particular attention to the lights, woodwork and arrangement of rooms — especially the kitchen.

Don't skimp on light. The oculist and nerve specialist will get what you expect to save. Place lights where they will be needed. In the living room of the house are three lights—one in the center for the lamp, one over the desk and one near the bookcase. Two



An inviting fireplace.

lights are in the kitchen, one over the sink and one over the range. Upstairs a light is placed in each closet and one on either side of the bathroom mirror. These are worth much more than the actual cost in the trouble they save.

The floors throughout the house are of hard wood. Only a woman who has tried to care for poor floors knows what this means. The trim, white upstairs and chestnut downstairs, is perfectly plain, since highly carved woodwork serves only to catch dirt.

Upstairs the rooms are all good size for bedrooms. The sewing room is the smallest, but is large enough to hold a single bed if desired. All are airy in summer if the windows are kept open a little. The closets furnish ample space for storing winter clothing and the many articles one wishes to save.

The upper hall and stairway are very attractive. The stairs are easy, and the window at the landing makes them light. The arch between the reception hall and the living room is just enough to divide the space into two rooms, though they can be used as one room when entertaining many people at one time. The fireplace is a great pleasure as well as convenience.

The kitchen is especially well arranged, as two or three steps bring one from the range to either the sink or the cabinet. The shed, opening from the kitchen, is a very convenient place for the refrigerator, brooms, dust pans, etc. Plenty of hot water is always on hand, furnished by a small heater in the cellar, where are also stationary tubs. The hot water heating sys-



The entrance door.

tem is used, and is satisfactory in every respect.

Altogether it is a good looking, well built house that is made to live in. The owner of this type of house will be pleased with his investment, and will find no trouble in recovering his money if he should be so unfortunate as to have to sell.

There are three elements which enter into and which determine the success of a house. The first, to many people, is the actual value in the house, with interest constantly accruing on the investment in the comfort which it gives. The other two are the attractiveness of the house and the convenience of its especial arrangements. Each of these is a direct asset which will pay a face value.



A convenient cupboard.

A Modest Two-Story House

IT is not unlikely that a great many people contemplate building; but hesitate on account of the high cost of building material.

The design shown is for a modest full two-story house. Planned for the business man with a small family, who wishes

market at from five hundred to a thousand dollars, that will give him his ride into the country on a Sunday afternoon, without feeling, when he gets back, that the cost of the trip has been excessive.

A house of this size can be built on a five to eight hundred dollar lot in the sub-



The entrance is sheltered by a hood.

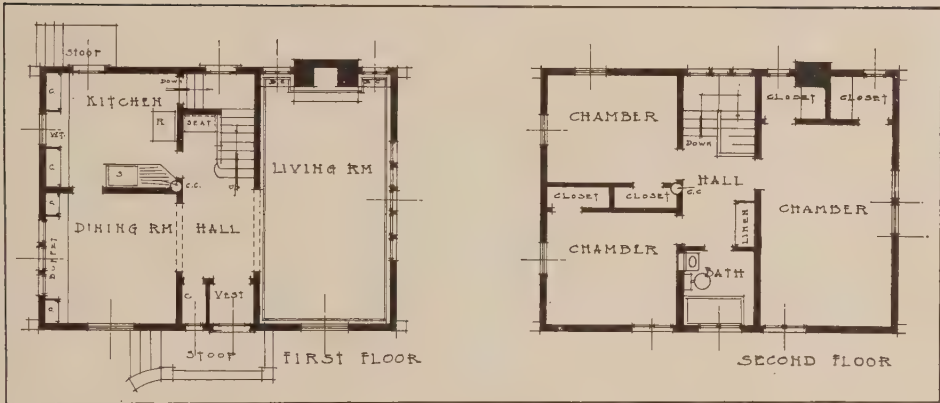
W. W. Purdy, Architect.

to own a home of his own without increasing the already high cost of living, for truly, it is the home owner that is getting the most out of living, and not the renter, who, while free from care and responsibility, has not even a place to hang his hat that he could call his own.

One need not spend five or ten thousand dollars in order to enjoy these privileges, any more than he must pay from two to three thousand for an automobile, when there are any number of cars on the

urbs, where the taxes are reduced to a minimum. The insurance and the upkeep are both minor considerations. In fact, a good lot in the suburbs of a growing city will increase in value enough to take care of the depreciation on a house of this kind. The interest, after all the main consideration, is now reduced to the minimum, so, with the advent of spring, why not have a home of your own!

It will be hard to find any better plan than that of the center hall arrangement.



The entrance is sheltered by a hood supported by plaster brackets, simple, yet effective in detail. The coat closet, convenient to the entrance, is lighted by a small window. With the stairway and a seat, with a hinged lid for storing rubbers, in the opposite end of the hall, waste space is reduced to a minimum. The living room on the right with an attractive fire-place and built in book cases and a wall beam on the ceiling, makes an exceedingly attractive room. The casements on the side are high enough to permit a davenport underneath. The dining room, directly opposite with its built-in buffet, as the central feature, makes a very pleasant room. The kitchen, while small, is about as convenient as it is possible to make it. The stair to the basement with grade door, leads down underneath the main stairs. This basement extends under the whole

house and contains the laundry, furnace room, for a hot water heating plant, with fuel room, vegetable, fruit and general storage space.

On the second floor are three well arranged chambers and a bath, opening off the center hall. The owner's chamber, over the living room has two large closets, each with an outside window. Note the convenience of the linen closet and clothes chute in the hall. The doors on the second floor are of birch, finished in tobacco brown mahogany, while the finish is of pine, painted an egg-shell ivory enamel. The floors are of birch—stained. The first floor is finished in oak with birch floors. Kitchen in pine. The bath has a tile floor and wainscoting.

This home should be built complete as described in the vicinity of Minneapolis, for from \$3,500 to \$3,800, according to the architect's estimate.

Shingles and Timber Work

SET high enough to give a good outlook, the projecting bay takes advantage of the sweep of view for this home built in one of the western states.

A glance at the plans will show that the floor space has been profitably utilized. The house is forty-two feet in length and its width is twenty-six feet. The exterior is of interesting general de-

sign and the side lines are perhaps more attractive.

Shingles of red cedar, set alternately two inches and six inches to the weather, are used on the exterior walls and the roof is entirely of shingles. The shingles of the walls are stained a tan color and those of the roof a terra cotta tone.

The fireplace chimney adds the texture of clinker bricks and is well proportioned.

and five large windows combine in making an extremely light and pleasant room. A hammered copper electric fixture lends a finish to this room.

From the hall the dining room is entered through French doors of pleasing proportion. This room has an attractive buffet and plate rail, is wainscoted with wood panels, and has also a beam ceiling with a central electric pendant fixture. The dining room, living room and



Set high to get the view.

Jud Yoho Architect

From a porch six feet by ten feet the hall is entered by a door three and one-half feet wide by seven feet in height, and on either side of the door are side lights of beveled plate glass.

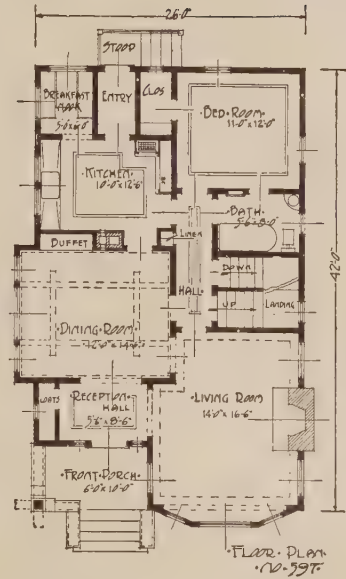
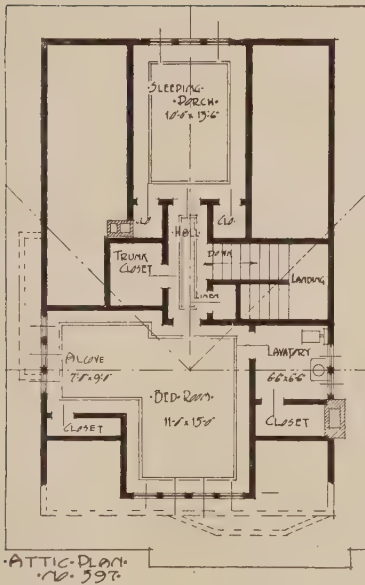
The hall, which is eight feet six inches by five feet six inches is wainscoted with wood panels, finished with photo rail and face beam, and has a convenient closet for coats.

The living room is entered opposite the fireplace, through a cased opening at the end of the hall, and has wood cornice at the ceiling. A cheerful fireplace

hall have oak floors and there are French doors between dining room and living room.

Reference to the floor plan will show that all the rooms are commodious and conveniently grouped. The simply arranged kitchen is well equipped. There are two large cupboards, a cooler, sink and drainboard. Beyond the kitchen is a rear porch, which is practically closed in, excepting for the door which is latticed and screened.

Another good arrangement on the floor plan is seen in the rear hall from



which the dining room, the living room and the rear bedroom are entered. This gives access to stairs going down to the basement, up to the sleeping porch and rooms on the second floor, and also to the bath room and the kitchen. In fact every room on this floor may be entered from this rear hall.

The back bedroom may be used as a den as there are two large sleeping rooms finished under the roof. In addition, a trunk room and linen closet, opening off the hall upstairs, are provided and the stairs are three and one-half feet wide with an easy tread.

The bathroom is of good size. A hinged cover on a seat in one corner provides a chute to the laundry in the basement. Both lavatory and bathroom have a medicine case with a beveled plate mirror in the door.

The front bedroom is eleven feet by fifteen feet with an alcove seven feet by nine feet. There are seven windows in this room giving direct light from two sides. The back bedroom or sleeping

porch is ten feet by thirteen feet six inches and has three large windows.

There is a full cement basement amply lighted and ventilated. Laundry trays are provided. The concrete floor is sloped to a drain connected with the sewer system, so it can be cleaned with a hose if desired. A hot air furnace with hot water coils is centrally placed. There are separate flues for the furnace and for the kitchen range.

The plan provides for four large clothes closets and a broom closet, enough to delight the heart of the most exacting housewife. The large number of windows provided throughout the house make it light and cheery. The wood, which is native fir, is stained a light oak color. The walls are light buff and the ceilings cream. The hardware is of brush brass, giving a most pleasing effect.

The house is roomy, contains little waste space and is withal an exceptionally serviceable and satisfactory house. The architect gives its cost as slightly less than \$2,800.00 to complete.

Influenced by the Swiss Chalet

IT IS often curious to trace the influence under which a house has been designed and note how easily it may be read. This home is not at all like the Swiss chalet either in form or exterior finish. It is much more complex in outline and shows at a glance that it was not built for people in the Swiss mountains. Yet one feels the Swiss character. The carved wood balconies and the brackets are essentially of the chalet type. In fact, all of the woodwork, in the slight overhang, in the gables and in the barge boards, is a little more strongly defined than the usual timber work of the low lands.

It will be noticed from the plan that the frontage of the house is rather broad. This particular home-builder found himself possessed of a narrow lot—there is

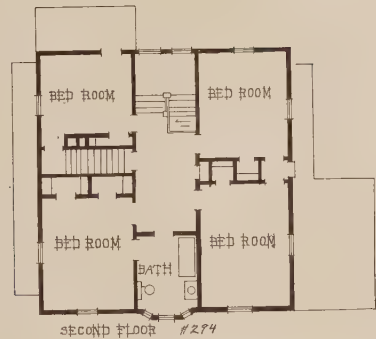
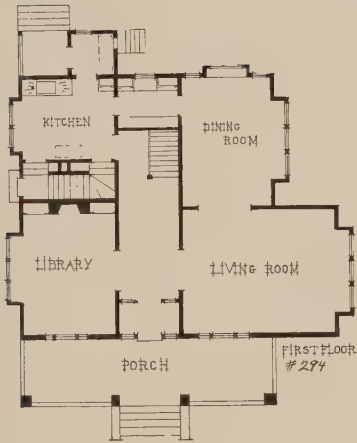
nothing unusual in having greater plans than the basis on which to complete them. As between the necessity of enlarging the size of the lot, or reducing the size of the house, there is generally no question as to the easier process. So the long living room was reduced to the width of the dining room, the two bays in line supporting the balcony. It still left a good living room, and reduced the cost to build as well.

With its central entrance and open hall the interior gives the feeling of ample space, with the library on one side the hall and living and dining rooms on the other. In the library is that feature of quick comfort, a gas grate, with bookcases on either side. Each of the four main rooms down stairs have projecting bays, filled with windows. The dining room has a



With wood balconies and brackets.

Lindstrom & Almars, Architects.



built-in buffet recessed under a wide window as well. The pass pantry with its well arranged shelves and cupboards, is under the landing of the main stairs and connects the dining room and kitchen. Under the rear stairs from the kitchen are the basement stairs providing grade entrance to the cellar, and side entrance from kitchen. At the rear of the kitchen is an open porch and an enclosed entry where is placed the refrigerator, iced from the outside. This placing of the refrigerator is also very convenient to the dining room and serving pantry, which is not always the case when the refrigerator is placed in an outside entry. A long distance between the dining room and the refrigerator always means many steps, especially when salad courses and other foods which must be kept cold are placed on the table. It is a point which

the home-builder will do well to consider when studying the plans for the new home.

On the second floor are four bedrooms, all with cross ventilation. Each room has good closet space. The owner's room has two closets and opens directly into the bath room. The stairs from the kitchen open into the housekeeper's room. Attic stairs open from the hall. Two rooms and bath are finished in the attic.

The second floor is finished in birch with tile floor in the bath room.

The main rooms on the first floor are finished in quarter sawed oak. The rest of the house in birch. The vestibule has a tile floor, and battleship linoleum is laid over the kitchen floor.

The exterior of the house is stucco over metal lath, with asbestos shingles in the gables and on the roof.

With Timbered Gables

A LARGE home, artistic, convenient, but at a minimum cost, is always in demand and this one was designed with just these requirements in view. The rooms are all of good

size and the arrangement is excellent. The den with its outside entrance is set apart from the rest of the house so that it may be used as an office if desired, or as essentially his own room, for the "man

of the house." A seat is shown but may be replaced by bookcases, and their position may be determined after the place for the desk has been decided.

The entrance from the porch is either into the den or the living room, and both again open into the hall. The living room and dining room, as well as the hall, are connected by wide openings, which may be closed by sliding doors. Bookcases are built under the windows on either side of the fireplace in the living room. The ceilings of both living room and dining room are beamed. The dining room has a recessed buffet built in beside the chimney, and a group of windows opposite the doors to the living room.

The chimney carries a flue for the furnace in the basement and one for the kitchen range as well. The sink in the kitchen has double drain boards and is well lighted. Beyond the kitchen is a screened porch and a toilet opens from it.

On the second floor are four bed rooms,

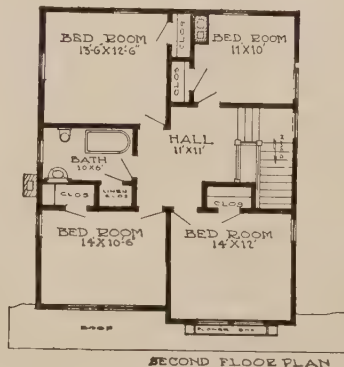
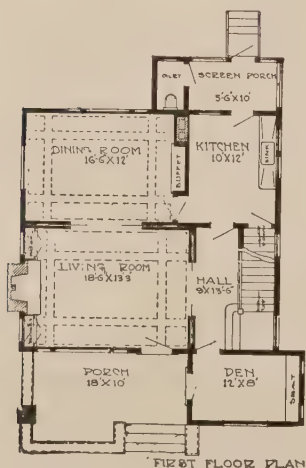


The gables are stucco with timber work.

each with windows on two sides, giving cross ventilation. Each room has a good closet. The linen closet opens from the bathroom.

There is a basement under the house with accommodation for the furnace and the usual arrangements for fruit, vegetables and storage.

The exterior of the house is of wood except the gables, which are plastered with cement, with Old English half timbering. The cut is made from a pen and ink drawing and does scant justice to the subject.



A Roomy Small House

FIVE bedrooms and a sleeping porch sounds like a large house, and when to this is added a sunny breakfast room and enclosed kitchen porch, with good sized living and dining rooms and kitchen it gives very complete living accommodations for a family.

An outside door from the dining room opens on a terrace which is pergola covered, and on which the breakfast room also opens. This breakfast room is really a sun room which opens from both the kitchen and the dining room. The service entrance from the kitchen to the



The side view is quite as attractive.

E. W. Stillwell, Architect.

Since the rooms on the second floor are not so very important the stairs and hall do not take valuable space at the entrance, but are placed so as to give access from the kitchen. It connects the two rear bedrooms and the bath room, as well. The front bedroom has a good closet so that it may be used as a bedroom, or as an extra room. The living room has a good fireplace with windows on either side. Sliding doors separate it from the dining room in a very satisfactory way.

dining room is on the other side of the built-in buffet.

The kitchen is fitted with cupboards and has a sink under the windows. A broom closet opens from the enclosed kitchen entry. An outside grade entrance connects with the landing of the basement stairs from the rear hall. The bath room has cabinets under the windows on either side of the basin, an excellent idea, and a linen cupboard is also in the bath room.

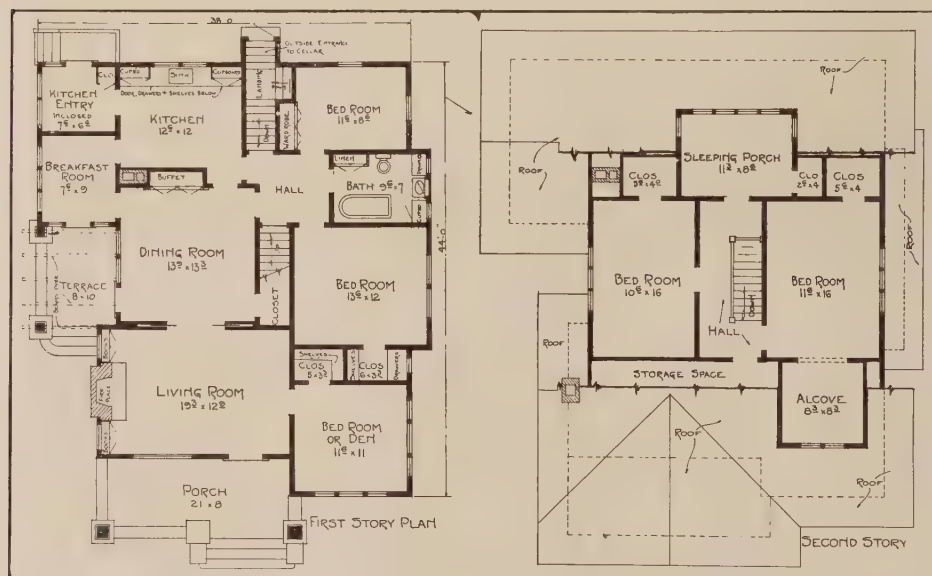
While the house is built along bunga-

low lines, two good rooms are finished in the second floor, with windows in the gables, and given cross ventilation by the dormer window. There is a good sleeping porch at the rear of the house.

The side of house is even more attractive from the opposite corner, making it suitable for a double frontage, but this view shows front and roof lines best. The slope of the roof makes the rafters

cut the second story bedroom ceilings, but only a little as the walls are six feet high at the lowest point.

Lower walls are siding. The outside head casings of all windows are on a line and made wide enough to form—with a molding and corbels—a finish for the shingled upper walls. Porches are cement with stippled cement plaster pedestals and walls.



With a Broad Frontage

WHERE the lot is of sufficient width a home with a broad frontage is very desirable, both for its looks and its comfort.

The design we are here presenting has a frontage of 38 feet with a depth of from 25 to 30 feet. The exterior treatment of this home is of brick veneer in the first story, or to the heads of the windows; cement on metal lath in the second story with half timbers showing.

The roof is low with wide projecting

eaves, and is dropped lower in the "wing" than the main portion of the house. This saves a little in the cost and adds to the attractiveness of the whole.

In this design there are two chimneys; one for the living room fireplace which projects beyond the wall as an outside chimney, and one for the corner fireplace in the den which also provides a flue for the kitchen and laundry.

The rooms are not large but are conveniently located and open well together



Brick Veneer with stucco above.

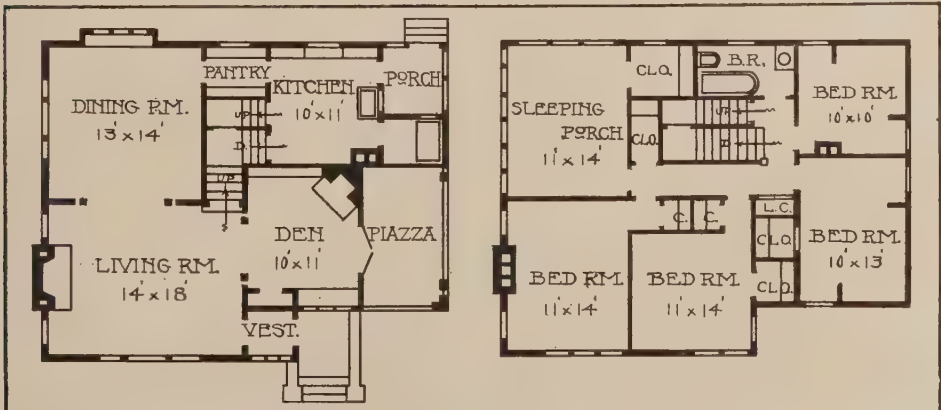
Chas. S. Sedgwick, Architect.

with wide archways. At the right of the den is a piazza coming under the roof which may be glazed as a sun parlor if desired. The stairway is centrally located, leading up from the main living room to a landing which has also steps from the kitchen, making a very conveniently arranged combination of main and rear stairs to the second floor. Stairs to the basement are under the main stairs, opening from the kitchen.

A convenient pantry with cupboard and shelf room connects the kitchen with the dining room. The kitchen is also provided with cupboard space, and in addition has a store room, in which is placed the refrigerator with an ice door from the rear enclosed porch.

The three principal rooms are finished in oak, the kitchen and pantry in white enamel.

The second floor has four good rooms



and a glazed sleeping porch. The bed rooms are provided with a good closet, the sleeping porch having a closet with a window large enough for a dressing room, the linen closet opens from the hall. The bath room is over the kitchen. Attic stairs are carried up over the main stairs, enclosed with a door at the foot.

The attic space may be used for storage, being lighted by dormers at the rear of the house which gives light and ven-

tilation. There is space enough for an extra room to be finished if desired.

The second story has a birch floor and wood work finished in white enamel.

The architect estimates the cost, without either heating or plumbing included, to be from \$3,800 to \$4,200. This estimate does not include the cost of finishing a room in the attic space, as suggested. The roof, as shown, is shingled and stained.

Homes of Individuality

Selected by W. J. Keith, Architect

An English Cottage Design.

THIS home was designed as a modified old English Cottage. Its simple lines and the soft shadows cast by its projecting eaves give it a most charming home-like appearance.

The floor plan suggested carries out the old English feeling, with the entry screened by the ballaster of a most attractive stairway. The fireplace, in the corner of the living room, breaks out square from the wall so as not to have the crude appearance of a corner fireplace. The openings to the dining room and the piazza flank it with pleasing symmetry. The piazza, on the side of the house, is just back far enough from the street to be away from the eyes of the curious and, being connected with the dining room, would make an ideal place for breakfast and supper on the long summer days.

The stairs go up from the living room but connect with the kitchen by three steps. Down four steps from the kitchen is the grade entrance, with the stairs to the basement under the main stairs. Between the kitchen and dining room is the pantry with a dresser built in on each side. The ice box is in the enclosed entry.

On the second floor are three bed rooms. The front bedroom has three good windows in the dormer, with closet space under the roof on either side. The bath room is conveniently located.

The exterior of the house is of stucco. A hood projects over the entrance, with open timber work and brackets. Flower boxes under the group of windows in the living room add to the attractiveness of the house.

A Western Home of Cement.

Simplicity of design and construction is the watchword today of much of the modern residence building. Not only may much individuality be secured thereby, but at the same time economy of construction, giving, as is secured in this case, the maximum of house for the minimum of expenditure.

The exterior of the house is plastered with cement stucco upon the regular frame of the house. The effective piers are plastered in the same way, and so are not an expensive construction. The plastered shelter over the projecting windows protect them from the too great intensity of the sunshine.

The main feature of the interior of this house is the magnificent living room, 17x32 feet in size, with its generous fire

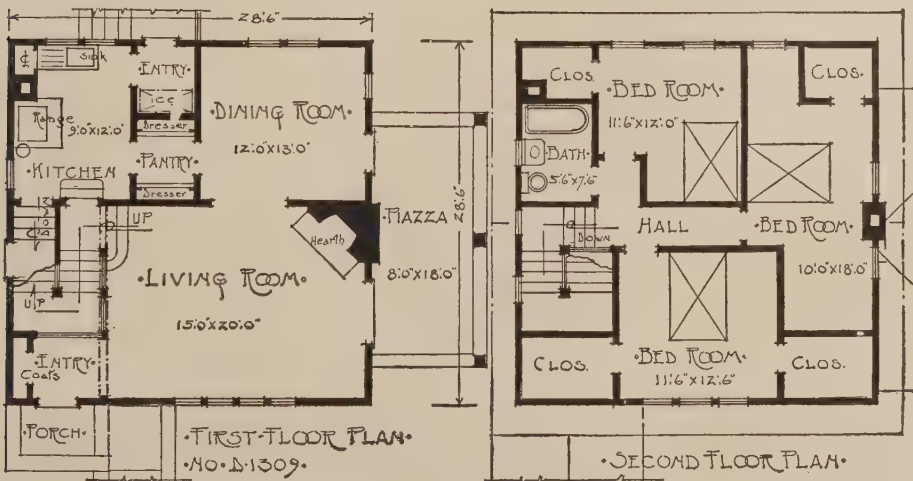


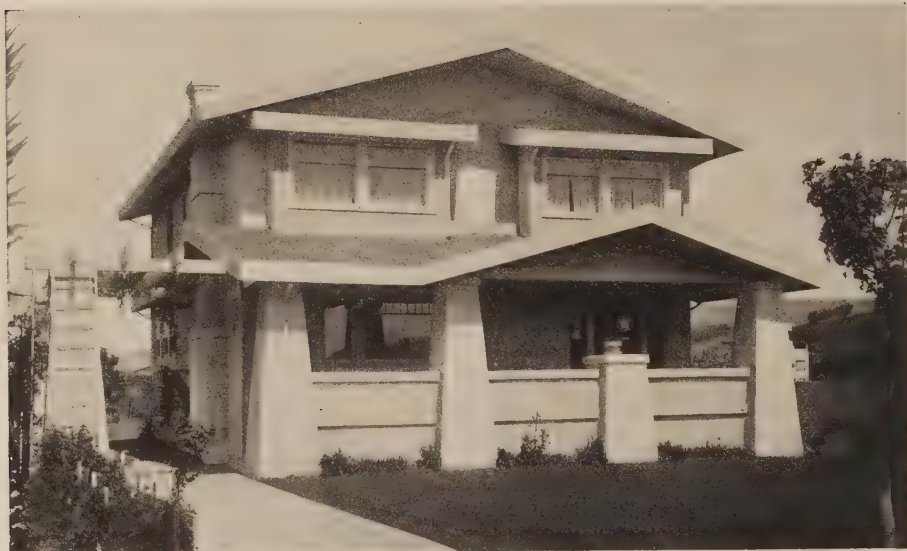
A charming home-like appearance.

place at one end, and the half screened staircase and sun parlor at the other. Beyond the living room is dining room with a projecting bay, and balcony or terrace at the other end. A large pantry with a high window and filled with cupboards is placed between the dining room and kitchen. A high sash in the wall

lights the lavatory, which opens opposite the stairs to the basement. Steps from the kitchen meet the main stairs on the landing. The refrigerator stands beside the outside door.

There is an outside grade cellar entrance leading to the full basement which extends under the entire house, with





An effective stucco house.

laundry, heater room, fuel bins, etc., making the home very complete in every respect. With all these conveniences the cost of construction should not exceed \$5,000, according to the estimate.

There are four bedrooms on the sec-

ond floor, large, well lighted, and airy. All have good closets and some of the closets are unusually large. The linen closet opens from the hall. Over the sun room is a sleeping porch which opens from two of the bedrooms.



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INSIDE THE HOUSE

DECORATION *and* FURNISHING

Conducted by Chas. Burdick, Decorator.

Color in Relation to Exposure and Light

IN THE interior treatment of the home, color is the first consideration, with design and form following very closely. Too much pattern in the wall paper, draperies and rugs without sufficient plain surface to bal-

ance is apt to prove very disconcerting. When the new home is planned is the time to consider the color scheme and interior decoration. Too many of us are prone to rush to the wallpaper store to inspect the "newest things" in hangings,

and make our walls a display space for the prevailing fashions in wallpaper.

We must plan our color schemes according to the exposure of the different rooms. For a north room, which is lacking in sunshine, warm glowing shades of browns, yellows and rose tones will give the effect of sunlight. For rooms with a southern aspect, grays, creams, blues and greens will be charming.



Dining room with its delicately beamed ceiling and wainscot.

INSIDE THE HOUSE

If the home builder has certain pieces of furniture, rugs and hangings which must be used, they should be studied carefully as to suitability and proportion. If they do not fit into the scheme harmoniously, they should be disposed of at once without the slightest hesitation.

The wall color of the living room

the furniture, as fancy dictates, which would not be possible if the fireplace were set in the end wall. This is a point well worth consideration by future home builders.

Did you ever step into a long living room where the fireplace was set in the end wall with most of the furniture



The living room in restful gray and rose.

Residence of Mr. P. C. Condit.

shown in the illustration is a restful warm gray with faint suggestions of dull rose in what you might term imaginary tones, glowing softly when viewed from different angles. Life and color is given to this charming room by the aid of dull old rose velvet hangings and the soft self-toned Chenille rug.

A feature of the room is the well placed mantel in the center of the long side wall permitting various groupings of

grouped near it, and the opposite end of the room having a forlorn and deserted appearance? If the room is at all narrow in proportion to its length it may seem to be out of balance and give you the impression that it is liable to tip up at any moment.

The room illustrated is nicely proportioned with the wide window in the front wall offering a splendid view of all outdoors. The draperies of rose velvet are somewhat unique in their arrangement,



the flat lambrequin valance being hung back of the side curtains, with a handsome silk fringe across the bottom edge. The side curtains are suspended from old fashioned gobelins, so popular in bygone days but now very difficult to find.

The entire grouping of draperies are fastened to one long thin strip of board, itself secured to the window frame by two small hooks, making it easily removable at house-cleaning time.

The laces are of the very popular panel style in pure Duchess effect. This lace hangs flat and is very sheer and as the decoration is at the bottom of the window it offers a splendid view from the interior, while the exterior effect is stunning. This Duchess lace comes in ivory and also in a soft champagne tint and makes a very practical glass curtain, as the soft tints will not wash out or fade.

The dining room takes on a Colonial atmosphere with the paneled wainscot and delicately beamed ceiling done in soft old ivory enamel. The panels are filled in with a Japanese grass cloth paper in

dull old blue with glints of silver running crosswise with the weave. The upper side wall is hung with a Tiffany blend in delicate shades of gray and blue, the ceiling being in ivory. The dining table and chairs are in pure Adam period with the seats of the chairs upholstered in dull old blue velvet. Life and color is given to this charming little dining room by the gorgeously colored English chintz window draperies printed in dull blues, gray and mauve over a cream ground. This same chintz is also used as a lining for the heavy portieres hung in the arch leading to the hall.

Voile curtains in a soft tone of amber trimmed with fine Barman lace tempers the strong light entering the wide windows. The beautiful collection of cut glass is set off to advantage by the heavy mahogany top of the built-in sideboard.


The lighting fixture suspended from the ceiling is executed in antique silver which blends beautifully with the blue treatment, and the candle shades are carried out in a champagne tinted silk.

Buying by Proxy

Keith's Guide on Home Decoration and Furnishing
Brings Some Notes from the Shops

Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration," a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given *free of charge*. Enclose stamp for reply. Write on one side of the paper only.

A Quaint Shop.

N a quiet back street in a dreary, dilapidated old building which did not look as though it could house anything of interest I discovered an old-time Master-craftsman of the cab-

inet-maker's guild. His dusty little shop was filled with the fine old pieces which he had been gathering and quietly working, apparently for many years, unnoticed by anybody. One could scarcely believe such a quaint shop possible in the midst

INSIDE THE HOUSE

of the busy bustle of a progressive mid-western city.

Here were many old-fashioned square pianos of antebellum days with a few spinets of antique patterns, and old melodeons. Piled up in tiers, minus the clumsy legs and covered with dust were many beautiful cases, nearly all of mellow toned rosewood with a few glimmering softly in their coats of fined grained San Domingo mahogany.

Stacked against the posts which support the sagging old roof were many wire-strung iron frames which formerly were the "inwards" of these grand old instruments and they vibrate musically when the neighboring jig saw tears its way through a tough piece of this precious wood.

Over in a dark corner a shadowy object aroused my curiosity, which proved to be an old tarpaulin, and peeping from under one corner was the stocky claw and ball foot of a lovely old secretary in mahogany with a slant top. The body of the desk contained three drawers on which were mounted quaint brass handles and key hole escutcheons. The overlapping drawer fronts stamp this piece of furniture as being over one hundred years old.

Pulling out the two wooden slides or supports and lowering the lid was dis-

closed a writing surface covered with a square of aged moth-eaten baize cloth or green felt, not glued on but actually fastened down with heavy brass tacks driven into the beautiful wood.

The rear of the desk contained four



Mahogany sewing table with two leaves, a reproduction, \$15.00; mahogany dressing case, restored antique, \$60.00; mahogany table lamp with two lights and extension, \$8.25; mahogany tip table, a reproduction, \$12.75; mahogany foot stool, \$6.

wide and shallow drawers with sides and backs, all of the same wood. Above the drawers were many little pigeon holes, while in the center, dividing these receptacles into two sections, was a center compartment with two little swinging doors. This little cubby hole did not appear to be as deep as the pigeon holes, and, on giving a gentle pull to the doors, some-

INSIDE THE HOUSE

thing clicked mysteriously and the whole compartment slid forward and out, revealing two little secret drawers in which the "master of the manor" kept his most valuable documents.

As my eyes grew accustomed to the dim light I discovered many pieces that smacked of Colonial days.



Library table of antique rosewood, \$25.00; Ottoman, reproduction in mahogany, \$16.00; pedestal floor lamp, solid mahogany equipped with two lights and extension, \$14.00.

Up near the roof astraddle a pile of lumber, perched a long mahogany sofa in pure Empire design with double curved arms holding the old-fashioned roll pillows at each end. It was covered with slippery and prickly black hair cloth and was a sight to make one weep, as the beautiful hand carved arms, at one time becoming loose, had been secured in place, not with glue and wood dowels,

but with hand wrought spikes driven through the face of the arm. The back of the sofa carries the same double curve as the arms with the exception of a raised section in the center and is deftly carved in acanthus leaves.

Hanging from a wooden peg in the wall like a ham in a butcher shop was a genuine antique "pie crust" tip table. Nothing can recall the good old Colonial days so distinctly as a "pie crust" table, which was used as a tea table, with the stately dames sitting upright in high ladder back chairs sipping tea and incidentally peddling gossip. This treasure had been very artistically treated with a coat of bright red paint but a little scraping with a knife removed the flimsy disguise and proved it to be heavy West Indian mahogany.

Secured to the wall with a rope to help it retain its balance on the rickety floor was a tall grandfather's clock with a bonnet top, the scratched and battered face showing the phases of the moon and days of the month and the chimes denoting the hours. Plick-Plock-Plick-Plock. In the deep hours of the quiet night, can you imagine anything more suggestive of the simplicity and charm of by-gone days as this old clock standing at the foot of the wide stairs in the spacious hall sonorously ticked off the hours that weigh so heavily or that go all too quickly.

Under the workbench with a discarded apron thrown carelessly over it was a beautiful rosewood ottoman and cuddling up to it as if for companionship was a dainty little mahogany footstool, both covered with layers of dust and shavings. Above the bench hung an exquisite mahogany mirror frame, minus the glass. The frame was about eighteen inches

INSIDE THE HOUSE

wide by forty inches high, the top being straight with a projecting cornice. The delicate side columns were exquisitely carved in the popular pineapple motif, terminating in a twisted rope design.

From the rafters hung innumerable chairs of splendid design, some in walnut, others in solid mahogany; also one in oak in the Stuart style with cane seat and back. Carelessly stacked in the corner stood the uprights of a beautiful old four poster; the canopy top having disappeared years ago. These perfectly plain but exquisitely turned posts were of red eucalyptus, a very hard wood often mistaken for mahogany.

In this crowded little shop surrounded with his primitive tools and littered with treasures of the past this craftsman repairs and polishes with patient skill and loving hand, giving to this mellow old rosewood and mahogany the allurements and charm of the olden long-past time.

These beautiful old melodeons and piano cases, he is remodelling into desks and tables, preserving all the charming curves and delicate mouldings of the originals. The heavy turned legs are taken apart, carefully reduced in size by planing down the inside surfaces and glued together again, giving them the proper proportion and balance, and finished to bring out the wonderful flame of color obtainable only in wood touched with age.

On a lathe—probably as ancient as some of these oldest treasures—he has been experimenting with pieces of solid mahogany, and the result has been many fine pedestal floor lamps, reading lamps and odd shaped candle holders, following the traditional lines and crude simplicity of Colonial days. Using some of the fine antiques as models he has made many beautiful reproductions in rosewood and mahogany, retaining all the fascination and stately charm of the originals.



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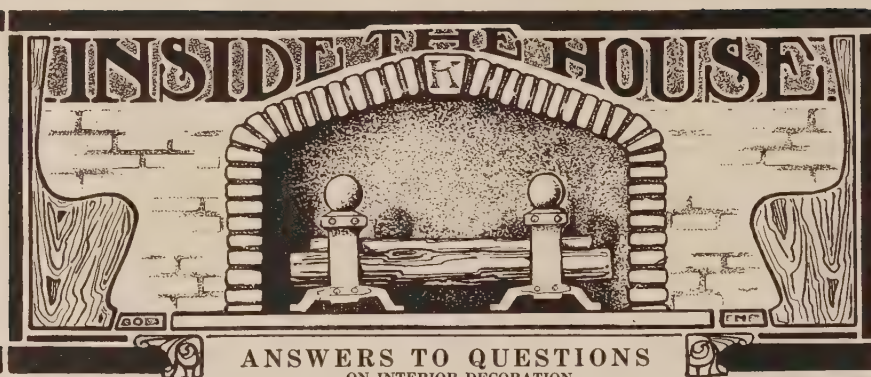
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The Kitchen Wall.

J. C. G. Will you please advise me in regard to my new bungalow, of which I send a sketch. Probably my golden oak dining room set would do to use.

Ans. The woodwork, if in oak, may be stained in fumed oak shade or early English; at the same time have your finishers scrape and bleach your dining room set and match up to the woodwork.

In the dining room window place a moss-filled cushion covered on both sides with a sunfast tapestry in a small design. This will enable you to reverse the cushion when necessary.

Robin's egg blue with ivory enameled woodwork for an east chamber will be excellent, but do not get the blue too deep. The draperies for this room can be made of white or ivory cotton taffeta or drill with a cretonne border on front edge and bottom. Blue draperies would give you too much color.

A simple white enamel wood bed with woven cane panels in the head and foot board would be stunning.

The other chamber with its sunny exposure should be treated in gray and rose. Finish the walls in a gray tint with the draperies and bedspread in soft rose in a solid color, with a couple of large rag rugs on the floor in gray and pink. A pretty chintz or cretonne with a light cream ground well covered with pink roses would look pretty in this room. The small hall opening off the dining room should be carried out in light tan.

By all means have a smooth wall in

the kitchen and paint same in a Colonial yellow or creamy white. Better still, hang the walls and ceiling with oilcloth made for that purpose. Have the man add a cup of common molasses to the paste before hanging and it will never start to peel. This can be washed with a good quality of soap and will last for years.

A Colonial Interior.

F. B. O. I would like to ask your advice on the color scheme of the rooms of my newly built house.

The front door opens into a central hall with an open stairway. I had planned to have all interior woodwork a flat white, also the stair, to carry out the Colonial effect. I had thought of yellow walls. Could I get a good effect having the living room walls painted a brown and the dining room a blue? For the kitchen I had planned a light tan, and for the bedroom a yellow treatment.

Ans. The interior being strictly Colonial, I would suggest that you keep the walls of the first floor rooms severely plain, using the colors as you have arranged them, simply as a background. A reception hall, particularly in the Colonial treatment, should be very formal, and you will find that the right shade of yellow, while giving a very cheerful atmosphere, will show reserve and dignity.

It would be well to consider carefully the depth of the brown for the living room. Do not have it too dark, as the room might appear gloomy on winter afternoons. A golden brown would make a nice treatment



PLAN WALLS LIKE THESE



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OAK FLOORING is made in 13-16 in. and $\frac{3}{4}$ in. thicknesses in different grades. $\frac{3}{4}$ in. can be used very economically over old floors in old homes or over cheap sub-floors in new homes. It is cheaper than carpets or pine flooring.

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The Oak Flooring Bureau

1348 Conway Bldg., Chicago

INSIDE THE HOUSE

with chintz hangings at the windows.

Select for the dining room a dull old blue, the hangings to be in chintz with blue design on a grayish white ground. The hardware trim and lighting fixtures will look well in silver.

Treat the library in different shades of olive green, having your rug in three shades of green with a touch of black if possible. Plain olive green repp or velvet will be very effective at the door and windows. This room being small, should be treated in one color, getting your contrasts from a few pictures, a bright copper plate or two and your book bindings.

Tan or Colonial yellow paint will do nicely in the kitchen, or white glossy oil-cloth in a small blue square about an inch each way.

Your bedrooms will be very effective using the colors as you have planned. If you do these rooms in oil two fine lines three inches from ceiling and one inch apart will relieve the plainness. The color for the lines may be taken from the draperies.

Your idea of making the bathroom a pure flat white with just a suggestion of blue is good. Add two blue lines just about the wainscot and running up and around the doors and windows.

Don't you think a flat white for your woodwork will be difficult to keep clean? A pure white enamel rubbed down to a very dull finish will show very little reflection and would be much easier to keep spotless. The hand rail, newel post and treads finished in mahogany would be beautiful and still be in the Colonial spirit. The risers and spindles should be finished white.

Furnishings for the Exposures.

A. S. I am an interested reader of your magazine and would appreciate your help in planning the interior decoration of my new bungalow. Enclosed you will find

diagram showing floor plan and a list of the furniture which I have already.

Ans. Your difficulty lies in the fact that your furnishings are adapted to north and east exposures rather than the south and southeast facings of living and dining room. Your furnishings are good and in harmony with the fumed oak woodwork and dark red brick, but the whole effect will be rather warm for those rooms. You do not state the character of the two rugs you have on hand, but in them lies your chief trouble. If you could do something else with those rugs, we could tint the living room walls a soft putty gray, put a green rug on the floor and use green for the hangings, not a bright grass green but a soft, sage green. It is possible your green rug with a little dark red could be used; you can tell best about that. The brown leather will be all right. The dining room, however, cannot take the brown, red and green rug. With the living room in gray and green, dull green and blues should be used in the dining room. A foliage paper in the reseda greens and soft blues on a part of the wall would be extremely pretty, with the remainder tinted dull blue and pale gray ceiling. Then get a mixed blue and green rug, and you will have two attractive rooms.

We would use curtains of blue and green cretonne on light gray ground in dining room, no others, and upholster the seat in the same cretonne.

The bedrooms will be rather heavy with mahogany furniture and woodwork also. You should lighten them up with a deep cream wall in northeast room and use a cretonne in pink roses and light green foliage for over-curtains, with rugs to harmonize. The other room could have pale grayish tan wall, with English chintz pattern of small bright colored flowers.

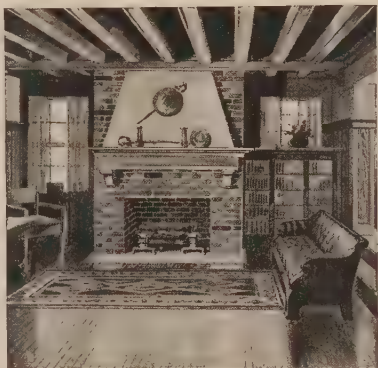
Decorative Service

WHERE detailed plans for HOUSE DECORATION are desired with samples and prices of wall paper, fabrics, window drapes, etc., the moderate fee of \$1.00 per room or \$5.00 for the entire house will be charged to defray the expense of our decorator's time in working up the plan, securing and mailing samples. Address

Keith's Decorative Service, McKnight Bldg., Minneapolis, Minn.

INTERIORS BEAUTIFUL

200 VIEWS



IN planning the new home or in the remodeling or decorating of the old one, the interior treatment, both as to architectural detail and decoration and furnishing, is very important. Correct expression of decorative schemes is a difficult matter for the average person to handle. In view of this, we have published in "INTERIORS BEAUTIFUL" two hundred selected views of the interiors of successfully planned and decorated homes and give, in the captions under the illustrations, the scheme of decoration used.

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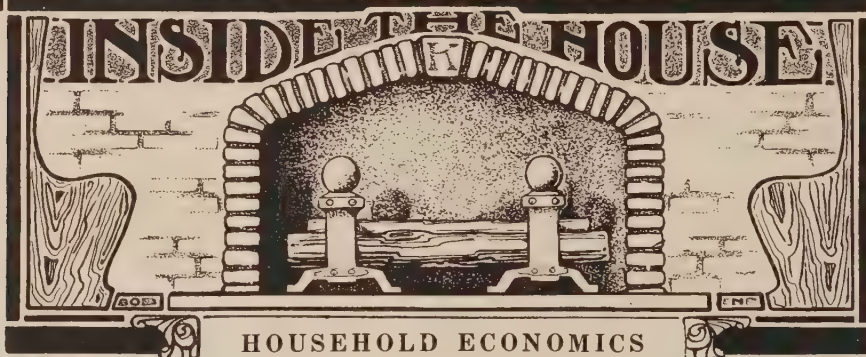
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LITTLE ROCK, ARKANSAS

Satin-like



Interior - Trim



An Ash Receiver

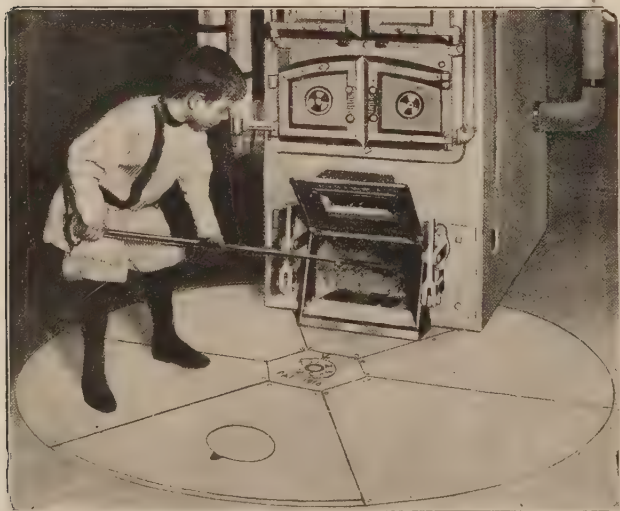
ONE of the problems of the householder involves the care of the ashes from the furnace, their storage while they are accumulating, and finally their removal from the basement, without danger of spilled ashes to ruffle the temper of the housekeeper before they are carted away. Many devices have been used involving a more or less expensive layout, and generally based on the ash pit under the furnace. If the plant is large enough to warrant an ash pit which extends through or under to the outside of the basement wall so that the ashes can be

hoisted directly from the pit to the cart from the outside, this makes a very efficient way of handling them. But to the householder the ash pit has its disadvantages, especially the scattering of dust in getting the ashes out of the basement.

The cuts show a device which gives a solution to this problem. While it is not intended to advocate children playing with the fire, the cut shows the top of the ash receiver installed under the basement floor, while the second cut shows what is under the floor and how the ashes are received.

The cans are shaped to fit closely together in the circle, on a revolving frame in the pit, one side of which is beneath the heater. When one can is filled the frame within is turned by a lever, bringing an empty can into place. The cans hold from one bushel to two and a half bushels, each according to the different sizes of the receiver.

There are two flanged wheels attached to the perpendicular shaft in the center. The cans rest on the bottom one and the hooks on the cans hold them to the top wheel. The whole thing revolves on a pivot made fast in concrete. It turns easily because it is on a pivot bearing and balanced, so that with the lever you can move it easily



An ash receiver under the furnace.

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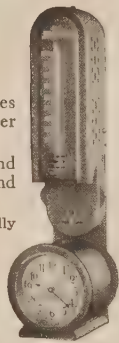
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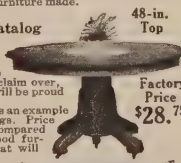
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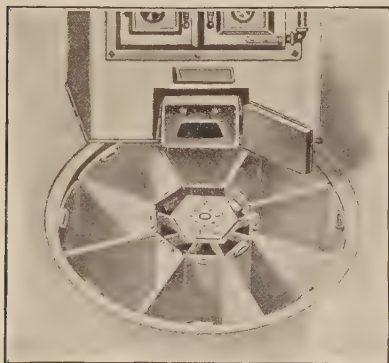
has consequently none of the disadvantages of tar, metal and other prepared roof-coverings. Simply laid on the dry boards and tacked only on the edges, it stays flat. Requires but one coat of paint.

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INSIDE THE HOUSE

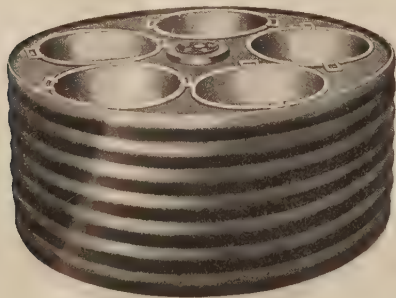


Ash cans in the receiver.

when all the cans are full. It stands plumb, even if only one side is filled, and nothing on the other.

Put the lever on the end of the shaft inside the dial and turn it until the next number on the dial is opposite the arrow. If the can is over full, the surplus is wiped over into the on-coming empty can, by means of an iron scraper for that purpose.

The cans fit so snugly together that only a little dust can get down between and the device is made so there is a space about four inches in depth all around under these



Receiver with cylindrical cans.

cans to hold this accumulated dust. The kitchen range can be attached if it is so located as to run a pipe down to the receiver? Any furnace dealer can make this connection.

One of these cover plates is removable, thus exposing a can, which is lifted out.

By a slightly different adjustment, the receiver may be set two inches lower and the floor cemented over the iron plates, leaving the dial exposed and a removable cover for taking out the can.

It is claimed that these cans may be used for garbage in the same way, as there is ventilation directly through the fire box to the chimney carrying off all odors.



Convenient for the ash man.

Another style of receiver has cylindrical cans, and may be set outside of the house. A cut shows it set beside the kitchen door, where garbage and ash cans may be kept out of sight and still be very convenient both to the kitchen and to the garbage and ash collector.

A simple type of hoist can be installed beside a convenient basement window, which has a plate on which an ash or garbage can, or in fact anything, may be set; the plate is raised by a convenient leverage, and rotated when the window is reached so as to place the can outside of the window, from which it may be taken away.

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They began by writing for our free books. From these they learned how the TUEC does all the hard work of house cleaning, how it removes all the dirt and fine, microbe-laden dust from every part of the house and its furnishings, how it exhausts the polluted, breathed over air outside the building and replaces it with sweet, pure, life-giving air from out of doors, —all at the touch of an electric button.

Then they asked other TUEC owners. When they learned from these how essential the TUEC is to clean living and how inexpensive it is first and last, they ordered the TUEC installed in their homes, with ample piping concealed between partitions and the powerful machine out of sight and hearing in the basement.

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The United Electric Company

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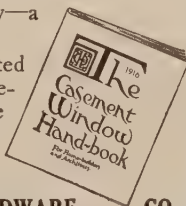
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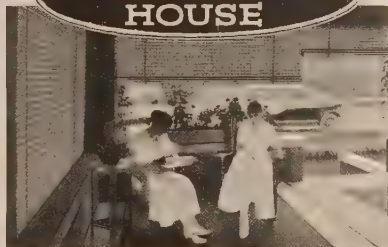
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Made of Aerolux Splint Fabric, they shut out sun yet let in light and air. Aerolux No-Whip Attachment, an exclusive feature, prevents whipping in the wind. Furnished in different grades and colors at moderate prices. An architectural adornment to any home.

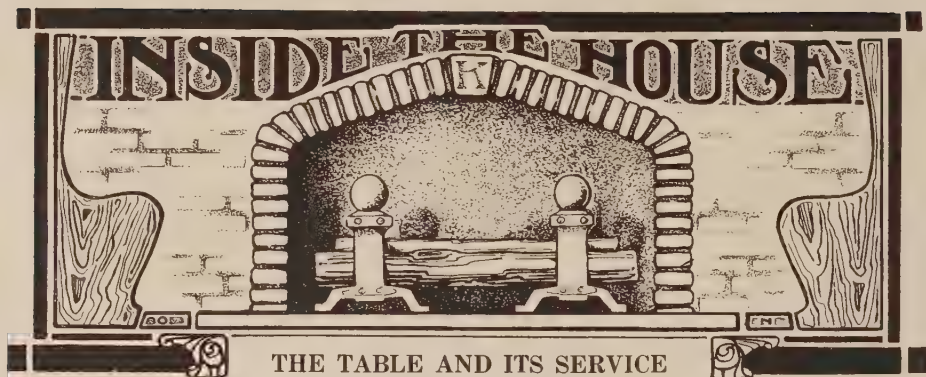
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THE AEROSHADE COMPANY

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THE TABLE AND ITS SERVICE

HELEN LITTLE

Safe Food

WHEREVER she looks or wherever she listens the housewife of today is confronted with a suggestion of unsafe food. Small wonder that she either becomes unduly prejudiced against all manufactured food products or on the other hand quite indifferent to unsanitary conditions in her food markets. Today the problem of adulterated foods is negligible compared with that of food manufactured, stored and sold under uncleanly conditions. The leading food manufacturers, it is true, point with pride to their wonderful factories whose cooking equipment is far superior to that of the average home kitchen. The housewife should take advantage of these efforts made in her behalf

by learning the names of the up-to-date food manufacturers and ordering by the brand or trade name instead of the haphazard method of ordering a "can of peas." In spite of the progress that has been made along food lines there are still many factories that are in the dark ages so far as sanitation is concerned. One such factory was visited by the writer. The odor of decomposing tomatoes was noticed miles away and the close inspection disclosed the suspicious evidence.

The housewife of today needs to be on her guard against use of inferior materials, "make weights" and substitutions, which are economic frauds which harm the family pocketbook. There has been a general impression that the pure food

law prohibited the sale of adulterated foods but it does very little of the kind. It simply requires the manufacturer to state on the label any adulterant, artificial coloring, or chemical preservative used. The use of the phrase "Guaranteed under the pure food and drugs act" has also misled many women who have supposed it to mean that the article was pure, whereas it was a guarantee from the manufacturer to the dealer protecting him in case of prosecution. So much confusion has arisen from the use of



Salmon salad in a cabbage.



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Design No. 327 by Jud Yoho, Estimated Cost \$3200.

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ST. PAUL, MINN.

INSIDE THE HOUSE

this phrase that a new rule has been made prohibiting its use.

I want you also to remember that a food may be pure yet poor in quality so that a list of pure foods is not always a safeguard as to quality. It will pay to investigate brands of canned goods, spices, flavors, coffees, teas, etc., until those are found which will stand the test not only of purity but of taste.

Are you interested in procuring pure nutritious food for your family? Would you really like to know what you are eating? If so a little food study will more than repay you for the time and effort spent. First of all learn what foods are most apt to be adulterated and pay special attention to those. In general, foods which are changed from their original shape can be most easily adulterated, for instance, spices, ground coffee, candy, jams, jellies, ground meat, such as sausage and mince-meat. If you will send for the published reports of the state food departments which can be obtained from the food and dairy commissioners of most states, and obtain copies of your city food ordinances, you will be able to more wisely purchase food supplies for your family.

Have you ever noticed the labels on the canned goods, vanilla extract, and spices which you buy? The next time you buy labelled food, examine the label and if it contains such terms as artificial or synthetic coloring, coal tar or aniline dyes, benzoate of soda, saccharine, fruit ethers; —beware. The above phrases indicate the use of substances which are deleterious to health. On sausage containers look for "Prepared with cereal" or "Cereal 5 per cent," which means the addition of starch or cereals which hold water. On potted meats the following trick has sometimes been used to fool the unwary housewife. The words "Potted meat, chicken flavor," are arranged like this:

"Potted
Meat

Chicken
Flavor"

The most interesting sort of food study is that conducted along the line of per-

sonal trips to the factories, bakeries, dairies, and food markets. As a rule you will find the proprietors of such places most courteous and accommodating and you will learn many facts about the sources of food supplies which will both astonish and interest you.

One woman can do little to improve food conditions, but by working with an organization such as the Housewives' League or with your local women's club much can be accomplished. She can, at any rate, get some definite knowledge of the foods which she places before her family, and which will allow her to make an intelligent selection in their choice.

Improved methods in the canning of vegetables have brought the luxury of green vegetables all the year round to the tables of even the less prosperous people, much to the advantage of their health as well as their pleasure.

Here are some recipes for their use which will help to vary the routine of the menu.

Some Recipes for Using Canned Vegetables.

Corn and Bacon—This dish gives a good meat substitute and a hearty food to serve in the winter time, also it is especially good, and easily prepared when out camping. It requires one-half pound of bacon, one can of corn, salt and pepper as desired. Cut the bacon in small pieces and fry out in pan, then pour off all the fat but about two tablespoonfuls, turn in the corn and cook until piping hot and well mixed; season with salt and pepper, serve immediately, and it will arouse the enthusiasm of the camping party.

Cabbage Salad—Hollow out a firm white head of cabbage, reserving the inside for creamed or scalloped cabbage. Flake one can of salmon or two according to the size of the cabbage. Measure or estimate the amount and add one-third part of celery cubes and one-fourth part of diced sweet midget pickles. Mix the whole with boiled or Mayonnaise dressing and fill the cabbage shell with this mixture.

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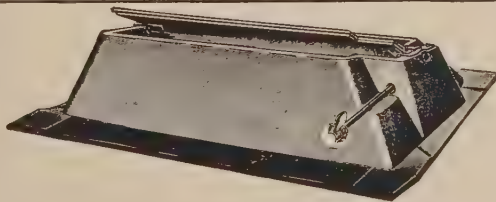
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MR. HOME BUILDER: Insist on your mason using the PEERLESS-DRAKE DOME DAMPER in your fireplace.

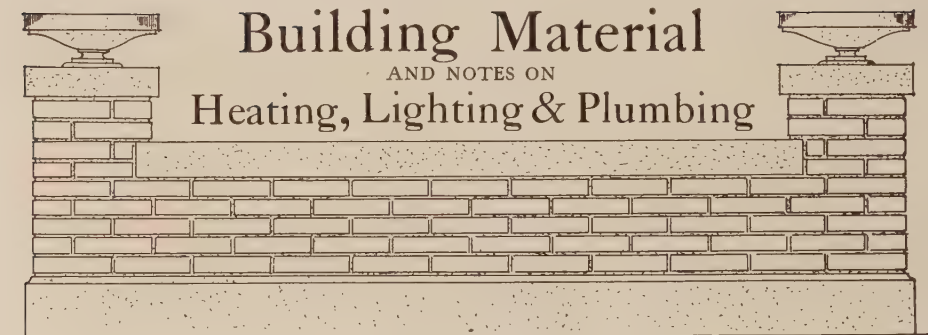
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Modern Lighting Problems.

SUPPOSE we should suddenly be spirited back to the conditions of our great grandparents in the matter of artificial light; we can scarcely realize what it would mean to do all of our evening work, and play, by the light of a "tallow dip," and even the blaze of light from a great chandelier filled with wax candles would not seem so glittering to us as it did to our grandparents. The contrast between their time and ours brings us face to face with the advantages and the faults of our present lighting systems. How far the abundance of light and the glare and eye-strain which accompanies it has to do with the nervous tension of this generation is a question which the later study of conditions and the development of lighting schemes may tend to improve. A paper read before the Building Managers' Association by A. O. Wallis, gives some very interesting points.

This subject is quite as interesting to the home builder, though in a slightly different way, as to the manager of great buildings, since he studies the effect of the light as it reaches the eye of the individual and its physiological structure.

"The eye being constructed in a manner to be able to protect itself against abnormal light, is provided with a device known as the iris.

"When the light entering the room, or the rays from a lamp, falls directly upon the work in front of the user at an angle which reflects the light directly back from the working surface, the result is an unnecessary eye-strain.

"Under these conditions, the iris con-

tracts so as to reduce the amount of reflected light which reaches the retina, in consequence of which the eye will not see as clearly the work it is intended to see, as it would if a lesser amount of light were used, but so placed that the angle of reflection would not reach the eye."

"As natural light is of primary importance, the windows of a building should always be designed so as to afford the most useful inflow of daylight. Large windows do not necessarily accomplish this, but may be very inefficient, if they cause a large amount of reflected light. This makes a double loss; maximum illumination wasted because improperly placed, and restricted seeing power imposed upon the eye."

"Except in especial cases where mural effects are desired, the maximum light should be delivered at the working plane. This is usually thirty-two inches from the floor." This refers especially to the business building and should be lower in a home, but all windows should be as carefully placed with reference to the uses of the room. A glare of sunshine across the floor of a sewing room has this unfortunate effect, as has a light directly behind the head as the housewife stands at the range or sink.

Indirect Illumination.

It has been found, however, that a system which gives the least fatigue to the eye does not always satisfy people who have been accustomed to a strong direct light. The habits of a lifetime are deeply imbedded with fixed associations and a room softly lighted, without any visible source of light, and without shadows, departs so widely from what we

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Soft, warm tones predominate in the room pictured above.

The walls are Mellotoned a soft brown, the ceiling a cream. The arts and crafts stencil is executed in brown Mellotone. The woodwork is stained a light brown with Lowe Brothers Early English Non-Fading Oil Stain—followed with "Little Blue Flag" Inside Rubbing Varnish rubbed to a dull finish.

Furniture, floor coverings and draperies all harmonize with the walls and woodwork. Red-brown and green are the prevailing tones. This beautiful room is only one of a number pictured in our booklet, "The House Outside and Inside," which we shall be glad to mail you on request.

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are just as the name indicates—"NON-FADING." They are made from permanent pigments that do not fade when exposed to sunlight, as do acid and water stains, and need no protecting coat of varnish. The Oil Stain is easily applied and dries to a beautiful flat finish. It is wonderfully durable and satisfactory.

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have been accustomed to for years that it gives an uncanny sense to those who have not themselves been conscious of eye-strain and uncomfortable glare under the older systems.

It was a long step from the tallow dip or wax candle to the electric light bulb of even eight or sixteen candle power.

With decreased cost and increased efficiency in electric lighting, people began to realize that the brilliance of the lighting and the glare resulting was a disadvantage rather than a growing advantage, and the indirect system of lighting was devised to give a sufficient amount of light and at the same time to do away with the objectionable glare, giving instead a soft restful light.

In the indirect system of lighting the electric bulbs are placed in opaque bowls at a distance from the ceiling which is definitely computed for each set of conditions in order to give proper light in the room. Under the lights in the bowl are strong reflectors which throw a powerful light against the ceiling, the surface of which is carefully prepared to

reflect and distribute the light over the room. It is really reversing the conditions of the streak of strong sunlight across the polished floor of the sewing room; instead of reflecting the light from the floor into the eyes it reflects from the ceiling onto the work. To those who have accustomed themselves to it, this light is very satisfactory and restful. At the same time it is rather extravagant in comparison with other systems in the amount of current consumed for a sufficient quantity of light obtained at the working plane for ordinary conditions.

Direct Illumination.

The object of direct illumination was primarily one of economy in current consumption, which economy was very essential in the early days of electric lighting, because of the high cost of the production of electricity and the large amount of current consumed by electric lamps for a required amount of light.

The illuminating engineer has been trying to create an ideal working condition, and between the two extremes of the direct and the indirect systems another has been devised to use the advantages of the other systems.

The Semi-indirect System.

In order to satisfy the eye as to the source of light the semi-indirect system of lighting places an electric lamp under the reflectors prepared as for indirect lighting, and replaces the opaque bowl with a translucent bowl or globe.

The arrangement and the design of the fixtures vary so greatly that the individual system should be studied carefully before deciding on an installation. The term has been used so loosely as to cover fixtures which do not have the essential principles of indirect lighting. Frequently two fixtures which may appear identical with each other have widely different efficiencies, on account of the chemical difference in the make-up of the glass.

The later systems of illumination have of necessity revolutionized the external design of lighting fixtures. Both gas and direct electric light fixtures imitated candles, antique lamps or torches and never established a form which essentially belonged to either gas or electricity. In fact even yet most direct lighting fixtures are an imitation of something which they are not.

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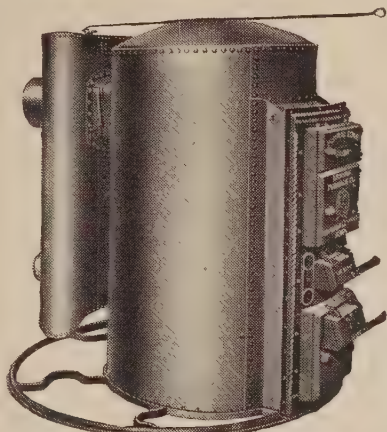
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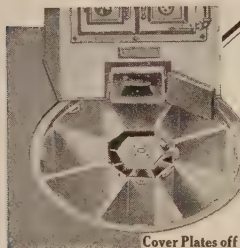
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Recommendations for Remodeling House.

Question 1. How far should top of window frame be below ceiling?

Answer. It is customary to have the top of the windows and door openings line up, and in a house with a 9 ft. ceiling for the first story the top of the window frames may be either 7 feet or $7\frac{1}{2}$ feet from the floor. This would leave the distance from the top of the window frame to the ceiling, in one case 2 feet, and in the other case 18 inches.

For the second story rooms, where the ceiling height is 8 feet, the top of the window frames should be 6 feet 8 inches from the floor, which would leave 16 inches as the distance from the top of the window frame to the ceiling.

Question 2. Where should fireplace be built, in or outside of wall?

Answer. An outside chimney requires a faced brick, and therefore costs more money than where the chimney is built all inside the wall, but of course if the chimney is projected partially on the outside it does not take up the space in the room, both up stairs and down, and our preference is for a chimney and fireplace partially on the outside.

Question 3. What size of glass should be used in second story window?

Answer. The size of glass for the second story windows is a matter that you may wish to determine by whether or not you want to keep the expense of these modifications down by using what is termed "stock mill size" of window frame. I should judge that you would probably want to use throughout the second story a uniform size window, double sash.

Question 4. What kind of hardwood flooring in dining room?

Answer. What to recommend here depends somewhat on other things. As I

understand it, you propose to re-cover the old floor. Parquet flooring would be nice. It is thin and would not bother you at the threshold, where you would have some trouble by using thicker flooring. Parquet flooring is usually oak and quarter sawed. Then there are other floorings in oak, birch and beech and maple.

Question 5. What trim in dining room, early English oak or golden oak, etc.?

Answer. As I understand it you propose to retain in the living room and reception room the white woodwork, in which case the sliding doors between the living room and dining room would very nicely match if they were in mahogany birch. This would then determine the trim of the dining room to be birch mahogany. You could, however, if you prefer to have English oak in the dining room for the trim, have your sliding doors oak veneered on the dining room side and mahogany veneered on the living room side. I would not care to see the doors oak on the living room side with the woodwork in white.

Question 6. What height should sliding doors be?

Answer. Make them the same height as the other doors so that they will line up. I think I would make all of the remodeled doors and windows the same height as those standing.

Question 7. What trim for the new stairs?

Answer. As you have a cased opening leading from reception room into hall, where the view is constantly open to the stairs, I would suggest white enameled finish with mahogany rail and birch treads, mahogany finish. The stair spindles would be white, capped by the mahogany rail and newel post.

Question 8. As the house faces east on a hillside, what would be proper window heights to take advantage of the view?

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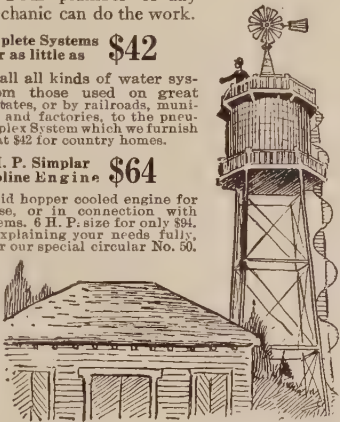
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Answer. The two sash windows will meet these requirements in that they will bring the dividing sash below the eye line of the average person standing. Precautions should always be taken that neither the meeting rail nor any bar of the window should come at the height of the eye, as is sometimes the case where the windows are divided two-thirds and one-third.

Exterior Stucco.

E. J. W. Will you kindly give me your opinion on the use of stucco in an extremely cold part of the country? Will it withstand a temperature of 50 degrees below zero as it is here often in the winter time? Is it considered as warm as other form of building material? Are there any special ways of applying it to make it more valuable?

Ans. Whether stucco withstands a temperature of 50 degrees below zero or not, I cannot say with much authority, as we do not get it quite that cold here, but we do have it pretty close to 30 below and we have a great many stucco homes that seem to stand the cold weather in this section without detriment.

I think if you have the best construction with insulating linings, that you would find the stucco finish would give you quite as warm a house as siding or shingles. There are several ways of applying stucco. I assume that you are talking now of a stucco exterior on frame construction. The proposition over tile is, of course, entirely different.

There should be a good insulating quilt either between the studs or covering them, under or outside of the sheathing. When this is stripped it adds another air space around the outside of the building, which protects against the cold outside. In addition to this a waterproof building paper should be laid under the metal lath.

There are several manufactured articles which accomplish this purpose: a fabric reinforced with metal which becomes embedded in the plaster, and a so-called stucco board which has a creosoted wooden lath embedded in an asphalt mastic, which, it is claimed, is proof against moisture, heat and cold. The lath have a dove-tail grip or a bevel on the under side of each lath to form a key for the stucco. You can, therefore, nail this lath right over the sheathing boards, but I believe that a warmer construction is to furr out so as to get more of an air space between the sheathing boards and the outer surface. This attains the same results, of course, as if you use metal lath with a good insulation.

* * *

"When driving a good many small nails in hardwood it is a good idea to have a small hole drilled into the end of the handle of your hammer and filled with tallow or beeswax. Before driving a nail, jab it into the wax and it will go into oak like pine."

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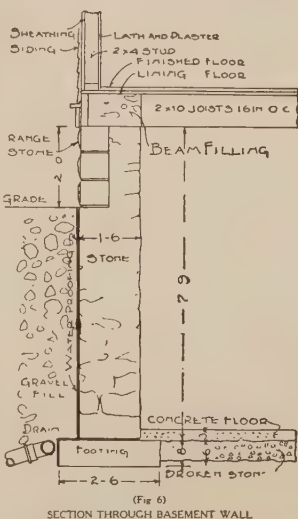
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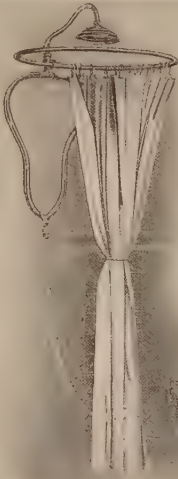
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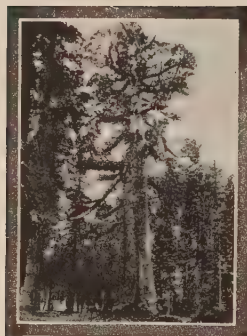
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WOODS

AND

HOW TO USE THEM



EDITOR'S NOTE.—When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH'S staff of wood experts. This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

The Sawdust Waste.



It is estimated that of the total cut of lumber in the United States, eleven per cent is wasted yearly in sawdust. The State College of Forestry at Syracuse has been carrying on this investigation and estimates that in New York alone enough good lumber goes into sawdust every year to build at least two thousand good substantial frame houses. In its studies of a better utilization of wood, this waste is one of the problems.

Under present conditions in the mill sawdust is used largely for fuel, but in order to burn in a green condition it must be mixed with fifty per cent of chips, or there must be a strong forced draft. It is becoming apparent that there must be a better use to which this granulated wood could be put than burning it or allowing it to rot in great piles wherever a saw mill has been operated.

Wood is a poor conductor of heat and sawdust is an excellent insulation which is used largely for insulating the walls of big ice packing establishments.

The sawdust comes from the very best of the lumber and the attempt is being made to find a use where its own valuable qualities may be utilized. We are told that in a dry state it is sometimes mixed with "wood flour" and various chemicals to form an artificial flooring which is an excellent substitute for linoleum. A satisfactory, yet inexpensive, kitchen floor is one of the crying needs

of the time and it is to be hoped that this may be fully developed and put on a commercial basis.

Wood Flour and Its Uses.

Sawdust is ground into "wood flour," either by means of mill stones as grain was formerly ground in old fashioned mills, or by means of steel burr rollers, which pulverize the wood. In this form it is finding a growing use in the manufacture of dynamite and also of inlaid linoleum. According to a late government bulletin, wood flour to the value of \$300,000 is used annually for these purposes. On account of the vast amount of sawdust which accumulates as a waste product in the mills, there is no lack of raw material for industries which develop a way to utilize this waste.

Wood flour is also used in making composition flooring, oat meal paper, and in several other products.

It is in special demand at the present time in ammunition factories as an absorbent in preparing dynamite for use.

For use in dynamite, the trade demands are said to require a white wood flour, since the freshness of dynamite stock is indicated by a light color.

Chemically bleached wood flour has recently come into use in making wood stucco, moldings, etc. Mixed with certain oils, some forms of sawdust and wood flour are used for floor polishing materials.

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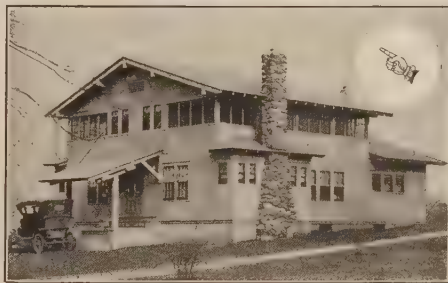
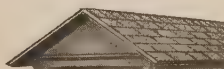
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a white or very light cream-colored flour having good absorptive powers. The wood species that may be used are confined to the light, non-resinous conifers, and the white broadleaved woods like poplar. Spruce, white pine and poplar are the species most used. Mill waste, free from bark, furnishes much of the raw material for making wood flour.

In the manufacture of linoleum, either wood or cork flour is used. The flour is mixed with a cementing material spread out on burlap and rolled or pressed to a uniform thickness. The cement is the expensive constituent. Cork linoleum is the cheaper because less cement is necessary. The patterns are printed on, leaving a dark base. For inlaid or straight-line linoleum, wood flour is used exclusively. Cork linoleum is always dark, and slightly more elastic than that produced from wood flour. The wearing qualities are about the same.

Wood-flour mills are scattered over the country, according to the bulletin, from Maine to California wherever the proper combination of wood and water power is available, and the domestic wood flour competes with the Norwegian product which, before the European war, was delivered at Atlantic ports for \$12.50 to \$15 per ton.

The mills of Norway which produce much of the European wood flour are of the mill stone type.

Steel burr rollers which pulverize the wood were developed on the Pacific Coast to handle sawdust as a raw material, and requires only one-fourth as much power to operate.

Gooseberry Bushes and White Pine.

"While it is established by legend that geese once saved Rome, it has now been determined, by fact that gooseberry bushes threaten the destruction of the pine forests of this country. The white pine blister rust was imported to this country on nursery stock of white pine, but it has been discovered that the disease cannot be communicated from one pine to another. Instead, it is transmitted from a diseased pine to currant and gooseberry bushes, and from them to other pines.

Hence, the Department of Agriculture

has issued a warning that the cultivation of these pie, jam and jelly producers should not be encouraged in the vicinity of pine forests. These bushes have been found to be the most vulnerable point of attack for the white pine blister rust. In Europe where this disease rages it has been found impossible to raise pine forests. It not only attacks the young trees but it will kill trees that are thirty years old. First found within the past few years, it threatens to become a most dangerous disease unless steps are taken to control it.

It has already gained a foothold in a number of the eastern states, and the government has been asked for an appropriation of fifty thousand dollars with which to fight it. The legislature of Massachusetts has been asked for ten thousand dollars for the same purpose. Meanwhile, since it cannot communicate from one pine to another, and does infect currant and gooseberry bushes from which other pines are attacked, it will be well for owners of pine timber and gooseberry bushes to either get rid of their timber and go to raising currants and gooseberries, or get rid of their gooseberry and currant bushes and specialize in pine. They are irreconcilable as companions in the same part of the country."—*Mississippi Valley Lumberman*.

Identification of Woods.

Some rather interesting contests have been held in Cleveland,—under the auspices of the National Lumber Manufacturers' Association,—in Dayton, Kansas City, Indianapolis, Minneapolis, and possibly other places, where several thousand people attempted to name the various woods shown.

There were two separate contests, one containing eighteen commercial woods, for which a prize of \$10 was given for correctly naming each one of them. The other asked contestants to name correctly the samples of four of the commercial woods, for which a prize of \$1.00 was given. The wood samples were six inches long, three inches wide, and one inch thick in their natural color. Of all the thousands of guesses, however, there were but five winners of the \$10 prize and but ten winners of the \$1.00 prize.

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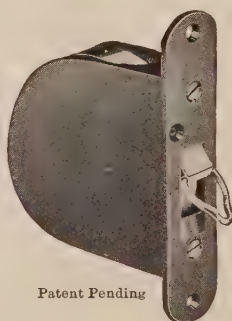
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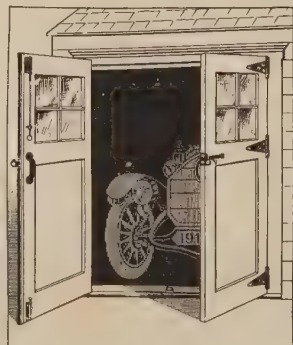
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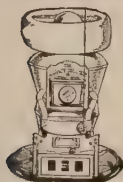
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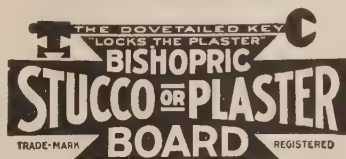
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(Continued on Page 421.)

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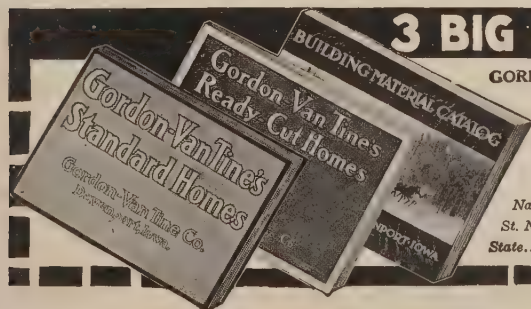
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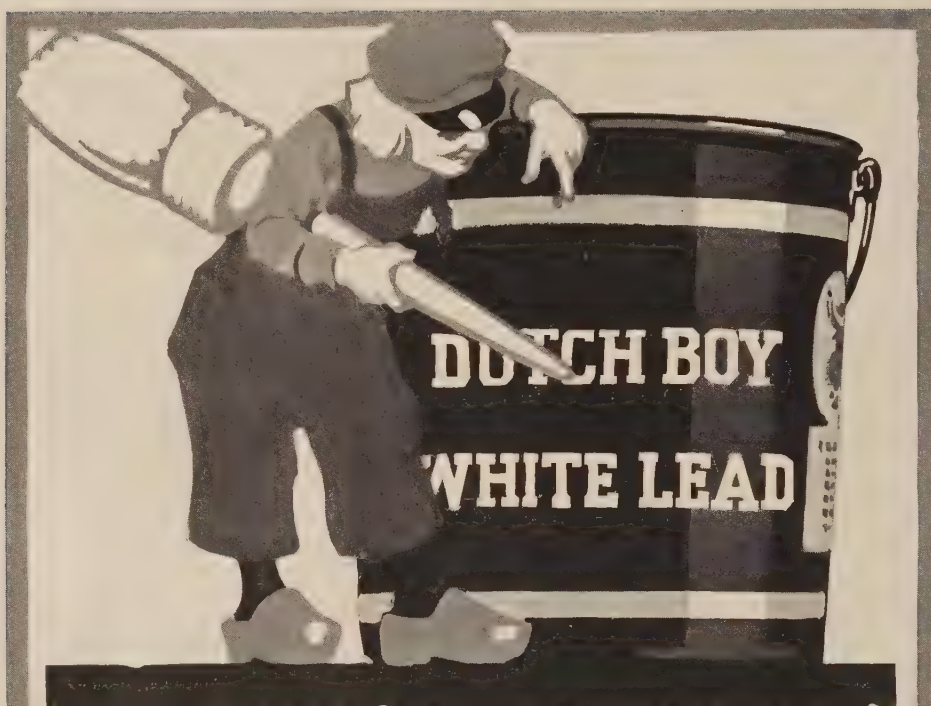
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(Continued from Page 418)

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ON HOME-BUILDING

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Just a Word

Know Your Building Materials



WITH the constant development in building, the home builder will do well to know the materials and devices from which he may choose.

The wood and lumber interests are carrying on a most valuable and enlightening campaign developing the specific values of special woods to special uses, and together with the Government Bulletins, are putting this information where it is available. Answering the question of fire resisting materials come new methods of fireproofing and treating woods. The range in variety of brick work is very wide; of hollow building tile there are different grades, shapes and designs suited to varying conditions, and so adaptable is this construction to many practical conditions that it is a material to be largely counted upon in the immediate future. The production of a white Portland as well as gray Portland cement greatly increases the usefulness of this facile building material, whose possibilities have as yet been hardly touched.

As building difficulties have been met, new methods and devices have developed which reduce labor, accomplish better results, and if not at less expense, tend to guard against carelessness or haste—two bad geni of present-day work. The market is flooded with new combinations of materials and new devices. The mails, and the waste baskets, are loaded with literature about them, and permanent building material exhibits have been established to display them.

More thought is being given to the utilization of local materials and local products. Stone from local quarries brings a building into its proper setting in the landscape. Woods and local clays have an affinity with their surroundings, while a greater cost in transportation is eliminated. With a steadily rising market, building materials must be subjected to closer scrutiny, not only for a possible cut in cost but even more particularly as to how fully each is fitted to the place it is called upon to fill.

The statement is made that the improvement in building materials, the increased efficiency of the better class of building mechanics (who are receiving increased wages for their greater skill), together with a wise choice of materials and devices, compensate in large part for the advance in the wage scale.

By taking thought of these things the home builder may reap the advantages which present-day progress is proffering, but he must know enough about materials to make wise choice in his selection, as well as in the matter of the design which may best fit his needs.

KEITH'S MAGAZINE

ON HOME BUILDING

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An inviting veranda.

KEITH'S MAGAZINE

VOL. XXXV

JUNE, 1916

No. 6

Some Charming Porches and Verandas

Charles Alma Byers



THE building of houses with good porches and verandas cannot be too much encouraged. Both health and pleasure are to be derived from out-door living, and an inviting porch or veranda can do more to coax us forth into the open than any other one thing. Those leisure moments or hours of the summer should be made at least profitable to our health, and where else than in some such fresh-air retreat can they be made more enjoyable as well?

Therefore, let us give to these features of the home the proper amount and the right kind of consideration.

In planning the porch or veranda, there are several things that deserve to be considered—location, size, style, furnishing and so forth. Some of these will naturally depend upon the house itself, but the matter of furnishing, as well as floral treatment, can always be more or less governed by individual taste.

A porch or veranda somewhere on the



A spacious California veranda

front of the house constitutes a rather common arrangement. Such a location will sometimes produce certain restrictions as to formality, but nevertheless, if it can be made sufficiently deep and roomy, and perhaps given a degree of seclusiveness through the use of vines and potted plants, it may become a very enjoyable retreat. A porch on the side or in the rear, however, rarely suffers any

valleys or even an elevated view of the city, with its myriad of flickering lights at night—an effort by all means should be made to so place the porch or veranda that such a picture may be enjoyed to the fullest extent. Some of the accompanying pictures may well be studied in this regard.

Both size and style will be also considerably regulated by the size and style



The rambling veranda of a country house.

such restrictions, and hence there can be no excuse for the failure to make it as homey and comfortable in the matter of general treatment as anyone can wish for. Moreover, such a location always affords the ideal seclusion.

But there is yet another thing to be considered in reference to this matter of location—namely, the possible view which may be commanded. If elevation or something else chances to give unrestricted command of some charming bit of landscape—a vista perhaps of green hills and

of the house. However, there is no house so small but what it may possess a porch of ample dimensions to make of it a satisfactory out-door lounging place. And style is purely a matter of appearance, with which comfort has very little to do.

The accompanying illustrations show porches and verandas of several different sizes and styles. There is, for instance, one view that portrays the front porch of a bungalow, of Japanese influence; another that shows the spacious veranda of a large home of the California Mission

style; another that illustrates a portion of the L-shaped veranda of a house of the imitation thatched-roof style of architecture, and others that, respectively, show the porch of a country house of the Colonial type, with the broad, sweeping view from the veranda, which of itself has been built on very simple lines, the rambling side veranda, of pergola type, of a Spanish home, and, finally, the redwood-log covered and columned front veranda of a house of an Americanized Swiss chalet style. Each is in excellent keeping with the particular style of architecture represented by the house, and not only does the collection introduce many different styles of porches and verandas but nearly every kind of building material is also shown to be employed in their designing.

In the creation of out-door retreats of this kind, the matter of furnishing is highly important—much more so than seems to be generally realized, or at least practiced. Some of the pictures here shown deserve to be especially carefully studied in this respect. The so-called wicker furniture is always particularly suitable and effective for this purpose, being comfortable and reasonably durable, and conforming admirably to floral treatments. Hickory furniture, however, is also always quite suitable.

And, in furnishing the porch or veranda, let us not merely begin and end with a few comfortable chairs. To them may be added, as suggestions, a swinging seat of some kind, or a hammock, and perhaps a tea or a reading table. And a few rugs on the floor will help materially to improve the effect,



A porch with a view.

and especially to make it the more cozy. Grass rugs are always highly satisfactory for this purpose, and in some cases, as shown by one of the photographs, Indian rugs can also be used with charming results.

The employment of floral decorations will be governed largely by the location of the retreat and by the amount of seclusion desired or permitted. Merely a slight tracery of vines over the columns or pillars will suffice in some cases, while



A veranda of red-wood logs.



The front porch of a bungalow with Japanese influence.

in other schemes a profusion of vines and flowers can be used. Hanging baskets and potted plants, of course, will not be forgotten, and through the use of them almost any porch or veranda can be made into a truly delightful and beguiling retreat indeed. To the person who loves flowers—and nearly every woman does—the porch offers some wonderful opportunities. Let us realize these possibilities and make the most of them. A properly designed and furnished porch or veranda tastefully and artistically decorated with flowers and vines does more to enhance the exterior of the home than any other one feature.

Nearly all of us are too prone to spend

an unnecessary proportion of our leisure time in the summer couped up in the four walls of a stuffy room. If the outside features of our homes be given the due amount of attention, we, instead, should find it after a while an easy matter to virtually eat, sleep and live in the open for a large part of the year. And for that afternoon hour especially, spent in reading or sewing or studying, or for that afternoon tea, why not have some attractive and comfortable out-door retreat, fanned by cooled and invigorating breezes, in close proximity to the house, to retire to? Then, too, there is the evening, after the day's work is done and the lights are on, to be reckoned for.



A Brick Colonial Cottage

Warfield Webb

WE see such a preponderance of small houses of the bungalow type that one is likely to grow just a bit weary of the style and to crave something in the small house that, while it might savor of the bungalow, will still add something that gives it a distinct type and

when the owner has been careful to study the varying forms of architecture and the numerous styles of the small home. He should know at first hand what are the possibilities before him and not depend on the designer to furnish ideas as well as put them in shape for use. It will demand



A home of the Colonial-bungalow type.

makes it stand as a happy medium between the bungalow and cottage or other type of building.

Every city has its quota of small houses. Every street has its illustrations of the houses we note. Each home builder is anxious to get away from the commonplace type and to get something that while being different, will at the same time offer a newer conception of the, as yet untried possibilities of the small house. This is only possible

thought, it will compel care and some original study for the adaptation necessary to get the actual things desired, so that the finished house may come as near as possible to a realization of the ideal he had in mind.

As an example of this newer planning and of the keener realization of a desired type, the several views shown herewith give a fair conception. This small house of the colonial-bungalow type, was planned by

the wife of the owner, after her own ideas, and not without a great deal of forethought and careful observation. The desire here was to have a modest home that would be a different and we might say a distinct type. In the neighborhood where this home is located, one of the better class suburbs of Chicago, there are many attractive homes of the smaller type. These for the most part run to the bungalow style, and still there is not a vast amount of difference in the entire section. With this very idea forcing itself into mind the originator of this house aimed to hold aloof, and the effect has been the building of a home along rather distinctive lines.

This house is built on a lot forty by one hundred and twenty-five feet. It is thirty-two by fifty feet in size, save that the rear portion is two feet less in width, though this is not perceptible at first glance. The exterior is of face brick running from a light to a dark red, rough face, with wide white mortar joints, and straight bond.

The entrance, on the north side, is slightly recessed and all of the woodwork is painted white. The latch and knocker are of colonial design and very good. The entrance is pergola covered, rather an unusual cutting being given to the rafter ends, and the same cutting repeated in the ends of the beams which carry them. The trellises are effective decorations of themselves, irrespective of whether they are vine-covered or not. The same is true of the trel-



The trellises and flower boxes are effective.

lises on either side of the group of living room windows.

The low, rather flat roof and wide eaves is covered with a composition shingle deep green in color, which gives a good contrast with the brick work and white trimmings.

There are five rooms and a sun parlor, so arranged as to make it convenient, compact and homelike. The foremost thought here has been to make it a home. That is the keynote and the one distinct characteristic in every phase of the house and lawn. The entrance at the side permits a larger share of room for the

rest of the home. The vestibule is tiled with glass panel door, leading up two steps to the inner door. This outer door serves as a double protection in winter and also makes a vestibule nook. From the inner door there is a hallway with a large opening leading directly into the living room. This is the large room of the house, being 14 by 22 feet, with brick mantel and fireplace, double windows, and double glass paneled doors, leading directly into the sun parlor at the south.

The latter room is a unique abode with its brick walls, harmonizing with the exterior of the house, and giving the room a cool and comforting appearance. This room is 8 by 14 feet, and is furnished with easy chairs and lounge of summer furniture. It is enclosed and can be used at any season of the year with comfort, it having, as the other portions of the house, a hot water radiator. The walls of the living room are

decorated with a gray paper, and over the mantel is a panel picture depicting a nature study that has a significant charm in its setting. The furniture of this room is colonial.

The woodwork trim of this room is of brown mahogany, giving a tone effect that is peculiarly pleasing to the eye.

Immediately back of the living room, and separated by the hallway that extends to the other side of the house, is the dining room, 13 by 15 feet, with its trim of Kaiser gray, the walls of which are done in gray below the plate rail, and a gray blue above. The large windows opening on the south side give a flood of light, while the radiator which runs almost the entire length of the opening, is placed under a window seat, which gives the addition of the seat and at the same time keeps the radiators out of the way. This room is furnished with William and Mary furniture and is cozy and inviting.

The bedrooms are located on the north side of the house, the first having a door leading directly from the hallway, is 10 by 12 feet, with homelike decorations and yellow tinted walls. Just back of this, and opening into a rear hallway, is the bathroom, with white tile floor. The second bedroom, 12-6x14-6 feet, is placed at the end of the house, connecting with the bath room. This room is tinted in old rose. Both of the bedrooms have continuous white enamel trim and mahogany doors, the contrast being effective and inviting.

The kitchen is back of the dining room, with glass panel swing door, giving it a direct connection with the latter, and finished in yellow pine trim. It has a built in china closet and refrigerator, located so that the icing may be done from the porch. Gas range, sink and kitchen cabinet make this compact and complete.

The attic is unfinished. In the basement, with entrance at the rear hallway, there is a billiard room with brick walls and colonial brick fireplace. The heating plant, coal bin and other essentials are also in the basement, so arranged as to be very convenient.

The lawn has been planned with an



The entrance is pergola covered.

abundance of old fashioned flowers, that give the surroundings an appearance of the old-time homes of another age. The concrete walk leads from both side and rear of the house to the brick garage, that harmonizes with the house, and the little archway, builded of wood, painted white, lends a new charm to the place. The rear fence is a large latticed or panel effect, in white, where hollyhocks are set in profusion, making a beautiful background. Looking at the home from the exterior it gives one the idea of colonial days, and



With its brick walls and wicker furniture, the sun room is very pleasant.

still there is the newer bungalow effect that makes the combination quite interesting. Electric lighting fixtures of modern design, make the lighting tasteful and pleasing. The cost of the house when built, without the ground, was something more than four thousand dollars, and this

is a low figure when we consider the character of materials used and the delightful effect attained. It has gotten away from the effort to build a bungalow, and has attained instead, the home that will find many admirers because of its simplicity and its clever design.

A Dash of Color

With our love for browns and grays, with our desire for unobtrusive backgrounds, we sometimes forget that color is essential to life, just as essential as form, and that a sort of mental lassitude, coldness, and indifference grows upon those who, in their surroundings, are indifferent to color. The psychology of color associates it with emotion, nevertheless there are colorblind people who have the full register of sensations and emotions. Though their color sense may be deficient in one or all three of the primaries, they have no indication of this in their attitudes towards life.

However, we normal people crave color, just a bit of it, and unless it is forthcoming, something seems lacking. How often has a brown room been spoiled, just because the decorations were planned with "everything to match" until it seemed as if the whole room were being viewed through a brown lens or a pair of amber-tone glasses. Oh, how a room needs not only contrast but a touch of the primary; a dash of red, a flash of blue, a splash of orange, a hint of yellow, a bit of green, an errant pulse of purple—just a trifle of color but enough to hold the eye and impress the soul with feeling! How a corner full of color will redeem a place! Just as a richly colorful room becomes luminous, so with the lives of the family. With color something is added; without it something is lost.

Evelyn M. Watson.

Some Groups of Oriental Rugs

George Leland Hunter

MOST things Oriental are mysterious, especially Oriental rugs. One should begin with the great divisions in studying Oriental rugs. One should learn to distinguish Chinese rugs from Bokhara rugs; Persian rugs from those of India.

Chinese rugs have an especially distinctive character. The weave is so loose and coarse, the colors so pale and delicate, with all strong reds absent, and with blues and yellows predominating. The designs, with few exceptions are of native Chinese origin, found also in Chinese silks, porcelains and other Chinese works of art.

However, until the last quarter of the nineteenth century, Europe and America were not aware that beautiful rugs had been produced in China. Not until then did a few seventeenth and eighteenth century examples begin to attract attention and admiration in Paris, London and New York. Since then as a result of the Boxer revolution, and other internal Chinese troubles, thousands of Chinese rugs have been sold at auction as well as in private sales in both Europe and America.

Noteworthy about Chinese rugs is the fact that the designs are less continuous than in Persian and other Oriental rugs. The motifs are apt to be detached, and



Chinese rug of the Kien-Lung Dynasty.



Royal Bokhara rug.

separated from each other by spaces of solid color. This is especially true of the rugs that show the signs and symbols of the literati. Also, the borders of Chinese rugs are much less important than those of most other Oriental rugs.

The pile of Chinese rugs is comparatively high, so that it leans over even more than the pile of Kazak rugs, and gives the Chinese rugs a peculiarly silky luster.

While Samarcand is now in Russian Central Asia, it was once a part of Chinese Turkestan, and subject for centuries to Chinese dominion. Consequently one should not be surprised at finding that Samarcand rugs are Chinese rugs, though with a strong leaning toward Persian. In other words, Samarcand rugs might be described as Chinese-Persian rugs. The designs are apt to be more continuous

than those of other Chinese rugs, and the borders more important, although the weave is more like that of other Chinese rugs, and the knot is the same; that is to say, the knot is the Sehna (sometimes spelled Senna).*

At this point I would like to explain that an Oriental rug knot is tied around a pair of warps. To make a Ghiordes knot, lay a short piece of wool over a pair of warp threads; then draw the

ends up through between the two warps and pull tight. The result is a Ghiordes knot. In the Sehna knot, one of the ends twists the other way around its warp, so that it comes up outside, instead of inside the pair of warps. In other words, when the Sehna knot is used, there is a knot end rising between every pair of warps; while when the Ghiordes knot is used, there are two knot ends rising between every second pair of warps.

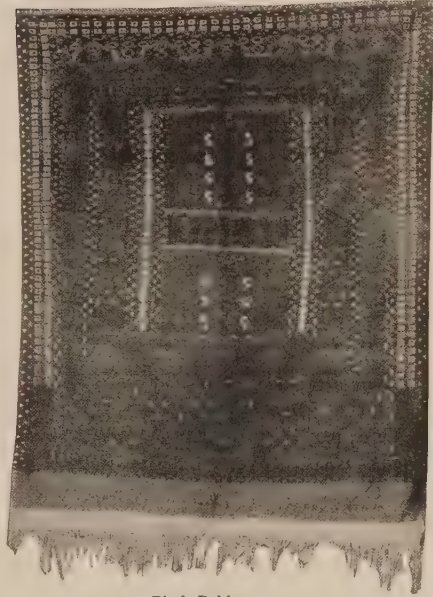
Bokhara rugs are also woven with the Sehna knot. Bokhara rugs are just as much distinguished for rich reds as Chinese rugs are by the absence of them. Bokhara rugs are much more closely woven than Chinese rugs, and the pile is trimmed much shorter. Bokhara rugs are woven in Russian Central Asia east of the Caspian sea, along the line of the Transcaspian railway



Princess Bokhara rug.

*These knots are illustrated more fully on page 383 of the December, 1915, issue of Keith's Magazine.

and also by the wandering tribes of Afghanistan and Belouchistan. The patterns of Bokhara rugs are radically different from those of Chinese rugs. They are without exception rectilinear, and the favorite motif is the octagon. Instead of cotton warps, they have entirely woolen warps, and frequently very long end selvages, and end fringes. Often these selvages are ornamented with embroidery or tapestry or broché figures.



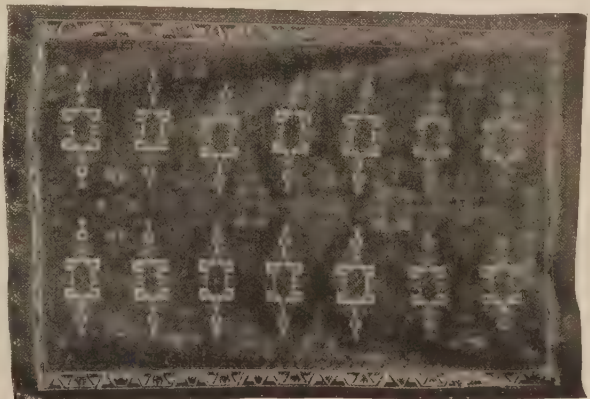
Pinde Bokhara rug.

The principal divisions of this group are Royal, Princess, Tekke, Yomud, Afghan, Belouche, Beshir, Pinde. The character of the different designs is made clear by the accompanying illustrations. The finest and most exquisite rugs of the Bokhara group are the so-called Royal Bokharas made in the Khanate of Bokhara, in the vicinity of the city of Bokhara, which is the capital of the Khanate and situated on the Transcaspian railway, and has always been the most important shipping point for Bokhara rugs. While octagon motifs are characteristic of Royal Bokharas, crosses or *katchlis* are equally distinctive of Princess Bokharas. As the illustration shows, the field of a Princess rug is divided into four quarters by a cross intersecting at the center of the rug. Rough and crude as compared with these rugs, but nevertheless interesting, are

those woven by the Tekke and Yomud semi-nomadic tribes that inhabit the country between Bokhara and the Caspian Sea. Of Beshirs not only the designs, but also the brick red coloration are distinctive. The Belouche Bokharas woven by the tribes of Belouchistan are a varied group in small sizes, many of them of inferior quality. The end selvages are apt to be very wide and often interesting, camel's hair often appearing in its nat-

ural color in the field. Of all the Bokhara rugs the only kind that comes regularly in large sizes is the Afghans. The traditional pattern consists of three rows of large octagons, almost in contact. The quarters of the octagon usually alternate red and blue.

Very different are the backs of Bokhara rugs from those of Chinese rugs. On the backs of Chinese rugs the coarse weft



Yomud Bokhara rug.

threads that pass back and forth after every two rows of the knots are plainly visible. In Bokhara rugs these weft threads are comparatively fine, and almost hidden by the woolen knots that encircle the warp.

For centuries the world's finest rugs have been woven in Persia, where the best wool for the purpose is grown. The designs of Persian rugs are not detached, as in so many Chinese rugs, but tied together into all-over patterns that usually cover every inch of the surface with detail. The designs are also peculiarly suited for interpretation in rug texture, being flat without relief shading, and also being

tied with the Sehna knot are apt to have a shorter pile and a less silky surface, but design of greater intricacy and more definitely outlined.

Although the city of Mosul is not in Persia but in Turkey—to be exact, on the Tigris, two hundred and twenty miles northwest of Bagdad,—Mosul rugs are properly classed with those of Persia. The rugs marketed at Mosul by Nomadic weavers from the north, from the east, and from the south, are the products of many different races and naturally show great diversity of character. Indeed, the only characteristic common to all of them

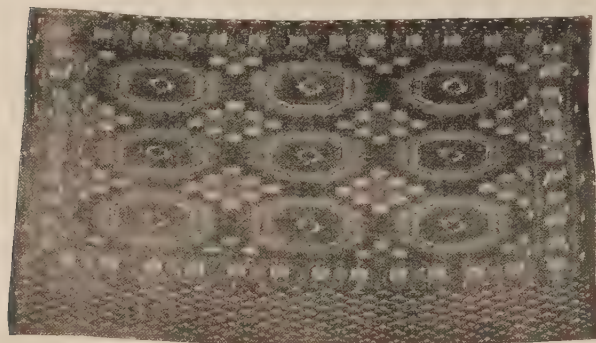
is the nature of the weave, though they are prone to yellow and russet hues and the wool is soft and lustrous.

The weaving of Oriental rugs in India became important in the latter half of the sixteenth century, when Persian weavers were imported and Shah Akbar, following the example of Persian princes, set up looms in his palace. A number of other Indian dignitaries imitated his example, and rugs of the

vivid with life, though not naturalistic to the extreme extent of many ancient Indian and eighteenth century Chinese rugs. Compared, however, with Bokhara rugs and Caucasian rugs and Turkish rugs, Persian rugs have designs that are full of curves and much nearer nature.

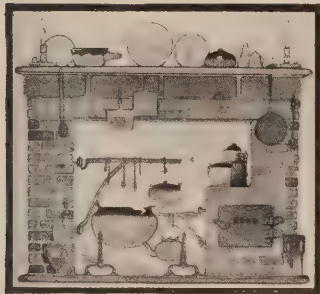
Most Persian rugs, ancient as well as modern, have cotton warps, and consequently fringes that are comparatively unimportant. Persian rugs that are tied with the Sehna knot, so-called from the Persian city of Sehna, are those that bear the names Sehna, Kirman, Khorassan, Kashan, Fereghan, Saruk, and Serape. The other varieties made in Persia are usually tied with the Ghiordes knot. Rugs

highest type were woven, in designs that were based on Persian designs, but were apt to be much more naturalistic. In the last half of the nineteenth century, however, the industrial development of India under English rule, and especially the introduction of rug weaving into the jails, substituted modern factory for primitive methods. Western designs had been introduced, bad dyes were common, and prison-made fabrics flooded the English market. It is only fair to add that during the last few years the quality of India rugs has greatly improved, and reproductions not only of Persian but also of Chinese rugs are made that compare favorably with the originals.



Tekke Bokhara rug.

NOTE.—We wish to acknowledge the courtesy of Good Furniture Magazine to whom we are indebted for these cuts of Chinese and Bokhara rugs and for their authorization of our use of parts of Mr. Hunter's article, which is of special interest to the home builder who is buying Oriental rugs.



In the New England kitchen.

THE KITCHEN



An early gas range.

The Development of the Range

Edith M. Jones

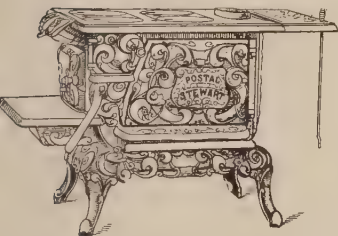
(Copyright, 1916, by Edith M. Jones)



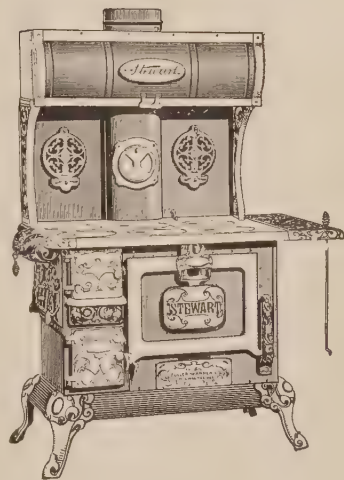
HAVE you ever stopped to consider what an important place fire has played in the history of man? Do you realize that all architecture began with the erection of sheds to protect the sacred fires of ancient times?

At first it was the tribal fire, and later the family, as it calls itself to-day, developed and provided itself with a per-

crude utensils to the machinery of the first class cuisine. True, the jump from the wandering savage fires to the modern gas range is a long one and although the methods and appliances have changed in the process of time the simple needs of humanity have not varied.

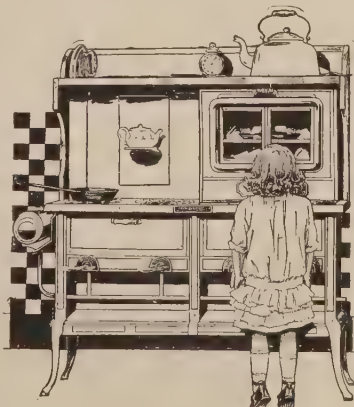


The old-fashioned cook stove.



The coal range.

manent fire. This family hearth was the altar and very center of the house. No oath was more sacred than the one a man swore by his own fireplace, and this fire was esteemed so greatly that it burned night and day. The apparatus and methods in cooking vary according to the means and education of the people—from the primitive fires and



The latest type of kerosene stove.

People have always cooked—cooking is common in some form or other to all the people of the earth except perhaps the Eskimoes, who allow frost to act as a substitute.

The earliest manner of cooking was roasting or parching whole, and it is interesting to study the different methods used by the different

tribes of people, because one can judge the development of the people in this way.

For instance, the Australians took little trouble with their foods. They would tear off the skin of the animal, hold it for a few minutes before the fire and then devour it in such large quantities that they would lie in a torpor for hours in consequence.



Gasoline cabinet range.

On the other hand, the early Polynesians were very delicate cooks. The modern fireless cookers, with the heated stones and radiators, remind one of their methods. It was their custom to dig pits and put heated stones upon the bottom, then layers of leaves, then the bread-fruit, then more leaves, more hot stones and then the earth. After an hour or two the fruit was thoroughly cooked and most delicate in flavor.

The kitchens as we find them during the middle ages were very simple. Often the butchering itself was done in the kitchen near the fire. In the 15th century we find the tripod and spit made their appearance and racks for broiling small game were introduced.

The North American savages had the art

of stone boiling perfected. I well remember a trip I took to Ft. Wrangle, Alaska, something over twenty years ago. I had the pleasure of seeing these people still using all their primitive methods. In this land of the totem pole the hand of civilization at that time had made absolutely no impression. There was just one white

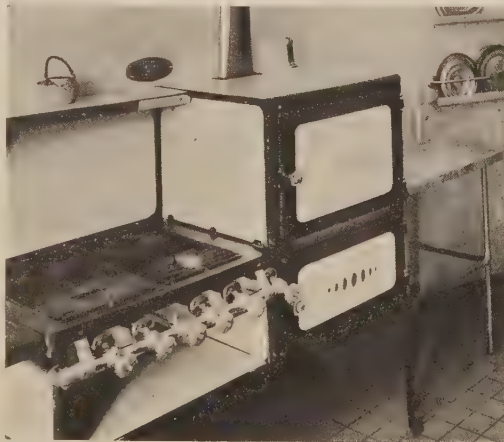
man, a missionary, and his wife in the place. We visited the huts of the Indians and found each family living in one large room which had a pile of stones in the center. These stones held the fire which was the center of the family life. Here the cooking of the family was done and around this fire they squatted to eat their meal, dipping into a common mess bowl with ladles of bone. Above the stones they built frames and dried their game and fish for future use. The Indians have always been remarkable in their methods of covering their fires and carrying their fire brands. With them, as with all primitive people it was considered almost a fatal omen for the tribe or family if this fire ever died out, and so it was guarded as though it were life itself.

It is interesting to know that the potters of the Pueblo region were the first to coax the smoke out of chimneys. They made these chimneys from the water jars by breaking out the bottoms, putting one upon the other and sealing the cracks.

The early English kitchens ex-



An early gasoline stove.



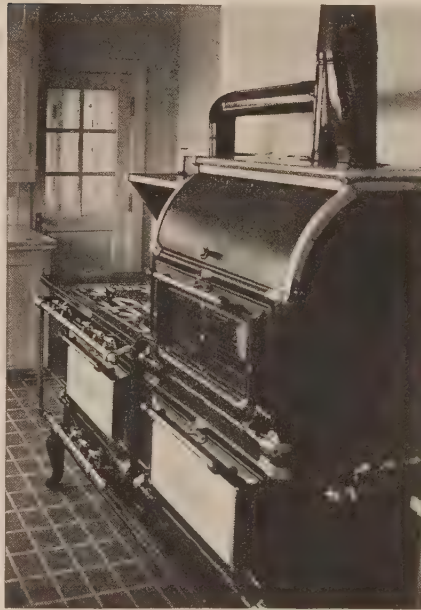
The white enameled range.

press much order and thrift. The chimneys, open fireplaces, hanging crane, the tin ovens for baking placed before the fire, and finally the brick ovens, were all steps in the line of progress. Our grandmothers tell us that the cooking in the New England kitchens can never be excelled and sometimes when we hear of those good things it makes us doubt if modern invention is so necessary after all.

Nevertheless, ever since Benjamin Franklin invented the cook stove it has been evolving itself under the influence of the great needs of the times until the beautiful gas and electric ranges of today have come as a blessing to every kitchen, doing away with the dirt and hard work and making the precious minutes of a day count for much more than of old.

For instance, we find the old-fashioned wood cook stove has given place to the later improved models of the coal range.

For the country and lake homes the old-fashioned gasoline stove has given place to a modern gasoline cabinet range, and the old kerosene stove has been supplanted by the much improved wickless blue flame. These kerosene stoves, owing to the gasoline market conditions, have become very popular in the last few years. The modern automatic is, perhaps, the best type on the market today. It is safe, reliable and substantial. There are no wicks to trim, and the heat is



The Blau gas range.

regulated with valves. The oil supply is automatically constant and the burners are close to the cooking kettles so that the heat is conserved and under perfect control. The ovens are well insulated with air space and asbestos, and bake very satisfactorily. The Blau gas and electric ranges, where expense is not a serious consideration, are proving themselves very satisfactory for suburban use.

But we all agree that the modern gas

range can boast itself the greatest boon which the progress of time has brought to the housewife. One has to be beyond the limit of the gas supply but for a brief season to appreciate what it means in the ease and comfort of the everyday life. When one stops to consider that the range is used three times a day for 365 days,



The last word in the gas range.

in other words, one thousand and ninety-five times in the year, one begins to realize what an important piece of furniture the kitchen range is in the family life.

The manufacturers have made much progress in general finish, construction and workmanship in the last few years. For instance the black finish of the up-to-date range does away with the dirty blacking of the stove and the white enamel covered ranges are not alone ornamental but practical because so easily kept clean.

The drilled burners are practically indestructible and are so made that they are easily taken apart and cleaned.

The ovens are rust proof and the im-

proved oven burners give an accurate, easily determined heat.

The automatic lighter is a great convenience, doing away with the annoyance of matches. The white enamel splasher backs and panels are good to look at and easily cleaned.

The rounded and covered corners of the different parts of the range are small but important details, and above all the elevated oven and broiler make cooking far more convenient and comfortable, and the space under the range is surely a great joy and satisfaction to the housewife in her efforts to keep clean.

So we see the evolution of cooking has kept pace with the demands and progress of the times and conditions.

Emergency Planting

M. Roberts Conover



N the matter of plants, eatable and beautiful, the man who moves to a rented place in the country after summer has begun is often handicapped. Though he is surrounded by fields and woods and all that nature does for the country in June there is need for a garden of some of the vegetables and there are almost always places about the lawn or dwelling which need the beauty which some rapid-growing vine or plant can impart. For instance, vines are wanted about the veranda or to cover an arbor to the pump or the garden. There is a raw place at the junction of the lawn and foundation and the soil is poor. What will grow there?

What will form the quickest border to improve the appearance of an irregular path?

Near the outer boundary of the place is a brush pile. What will cover that? There is an old hedge grown "leggy" and rough. The ground shows under it bare

and ugly. What will grow there? An old tree stump looms severely up from the lawn where once was a majestic tree. What will beautify it quickly? A kitchen window is too sunny. The poultry yard does not look well from the house. A fence of posts and barbed wire runs down one side of the lawn. What will relieve its nakedness?

So really the need for quick-growing annuals are many and diverse. Of course, if one can procure and plant without stint, there are many annuals and a number of perennials which will flower quickly enough to meet these conditions but where one must begin with seeds to get a quick cover and some bloom before the time of stay is ended, the list of plants is alarmingly limited.

As a preliminary to rapid growth have the spots to be planted well dug over and to quite a depth so that the soil is light and porous. If one can get poultry manure and mix it with leaves and sandy

loam in the proportion of one-third of each, or use one-half loam and one-half well-rotted stable manure, black and fine, it will work well where the quick annual vines are to be grown. Gourds, for instance, grow with wonderful rapidity in such a soil, and in the garden patch such a dressing for cucumbers and squash will insure the yield of these vegetables before one turns citywards.

From among garden vegetables the man who is to stay at least two months may choose the following:

Peas—Melting Marrow and Dwarf Champion need no trellis.

Radishes—Cardinal Globe, French Breakfast, Landreth's All-season, Golden Globe (30 days), Scarlet White-tipped forcing (20 days from planting).

(Plant these where it is a little cool and shaded.)

Lettuce—Simpson's Curled Lettuce.

(A cool, moist place is best for this also.)

Spinach—Henderson's Long Season.

Cucumber—White Spine, Cool and Crisp.

Egg Plant—New York Improved or the Large Round Black.

Tomato plants about 6 inches high set out June 1st will bear by August. Livingston's Coreless, Matchless and Stone are good varieties.

Muskmelon—Emerald Gem, 80 days from planting; Anne Arundal, 70 days from planting.

Beets—Crosby's Improved Egyptian, 40 days from planting.

Squash—Delicata, White Bush or Cym-ling, Summer Crookneck (use when small, as late plantings toughen soon).

As to flowers:

For borders or bedding, use Tom Thumb Nasturtiums, Sweet Alyssum, Ageratum, Portulacca or Dwarf Morning Glories. Phlox Drummondii and Petunia planted by June first will bloom in August. If one intends staying into the fall, Zinnias and Marigolds will help out the list. For tall effects the Castor Oil Bean, Cannas and Caladiums are very useful. You can get good foliage effects with these before the summer is over if you plant by the first of June.

The Summer Cypress or Kichia gives such lovely effects that it is worth while to try some plants ready started at a florists. It is very useful as a background for low borders.

In those puzzling spots where quick and rapid covering with vines is necessary, these annual vines will prove useful:

Balloon Vine.

Ornamental Gourds.

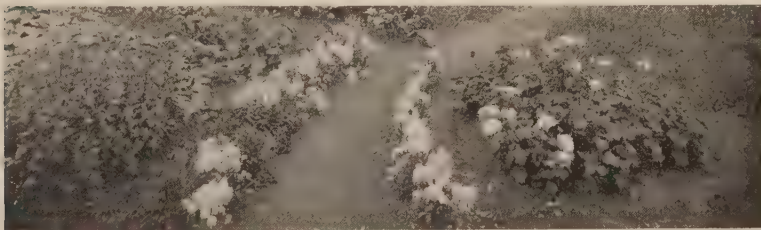
Hyacinth Bean.

Climbing Nasturtium and Cypress Vine (for fences and lower effect).

Wild Cucumber (where higher vines are wanted).

Morning Glory.

Of course one cannot expect as early bloom or as extensive growth as where these vines have more time, but they will grow rapidly enough to fill in gaps and cover unsightliness in a few weeks.



"Ye Lytel Nest"

A Labor-Saving Bungalow

Charles Saxby Elwood, Architect

"**Y**E LYTEL NEST" is an air castle. Even the wooded plot on which to build it lies beyond the green hills of hope.

Unusual in design it is. But, though an air castle, there is nothing of the freakish or impractical about it. Its details have been worked out most carefully

table, surprisingly enough, has within its drawer-section a practical, comfortable double bed complete with bedding.

Heat is supplied by a scientific furnace conveniently located in the basement—clean, fresh, out-door air, warmed and healthfully moistened.

The living room finds its happiest feature



The low-lying effect gives a charm on hill or prairie.

by experienced hands, its mechanical equipment is made up of thoroughly tested devices.

It is so arranged, so equipped, that, lacking a servant, the housewife need fear no drudgery. Housework, cookery, here demand but a few pleasant hours daily thus yielding added hours for recreation and good citizenship. "Love in a cottage," once deemed folly, becomes well-ordered, joyous.

Plan and illustrations speak for themselves. There is a compact basement with a laundry. And though seemingly there are but two sleeping rooms actually there are three. For the simple dining room serving

in its inglenook with cheery fireplace and inviting seats. With the woodwork stained a warm dull brown, with the soft-hued tapestry brickwork and the refreshingly colored Maxfield Parrish prints with their golden borders, the whole nook would possess rare charm of a winter's evening.

Buffet, serving table-bed, desk, bookcases, and seats are all built in.

The kitchen, compact for step-saving, will have washable walls of some fresh sunny tint. A well-lighted room it is with sink and drain boards (with cabinets below) built in beneath the windows. There is ample cupboard space and a well-placed



The inglenook is a happy feature of the living room.

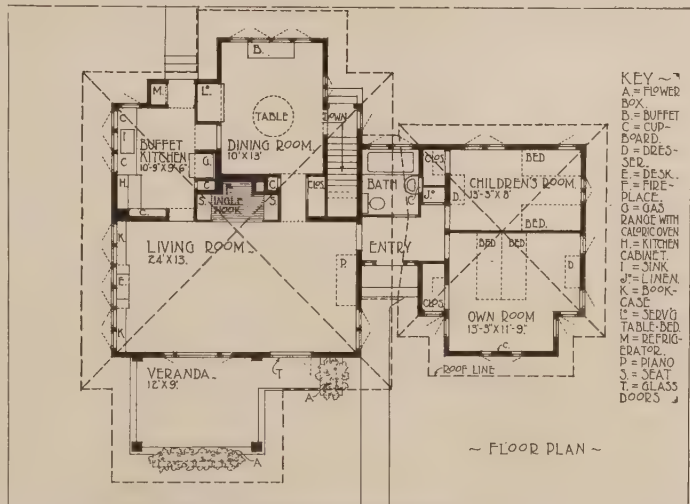
refrigerator. One of the modern scientific kitchen cabinets supplants the usual built-in variety. Space is provided for a portable electric cleaner and a special gas heater insures unlimited hot water in kitchen and bath room at a turn of the faucet. The gas range seems just like the standard variety but—it isn't. Its oven is actually an efficient, fireless cooker providing for cookery most appetizing and marked economy in fuel. This magic oven positively insures against cold meals or burnt foods and gives the housewife new freedom. She can leave the house confident that foods in the oven cannot be overcooked.

All windows in "Ye Lytel Nest" are casements opening outward. The effect, indoors and out, is most attractive and, when one wishes it, almost any room becomes practically an airy veranda. This is particularly worth while in these days of fresh air sleeping.

Out of doors entrance and veranda are happily separated and thus "Mr. Peddler" or the stranger in quest of information do not spoil your siesta nor intrude upon your quiet chat.

The ground plot for the nest must be at least sixty feet wide. If still wider the cottage will gain an added charm.

In soft silver gray will the little home be stained with roof and trim moss green. The low-lying effect will give it real charm on hill or prairie and tend to make it yet more inviting if it be nested among tall trees.

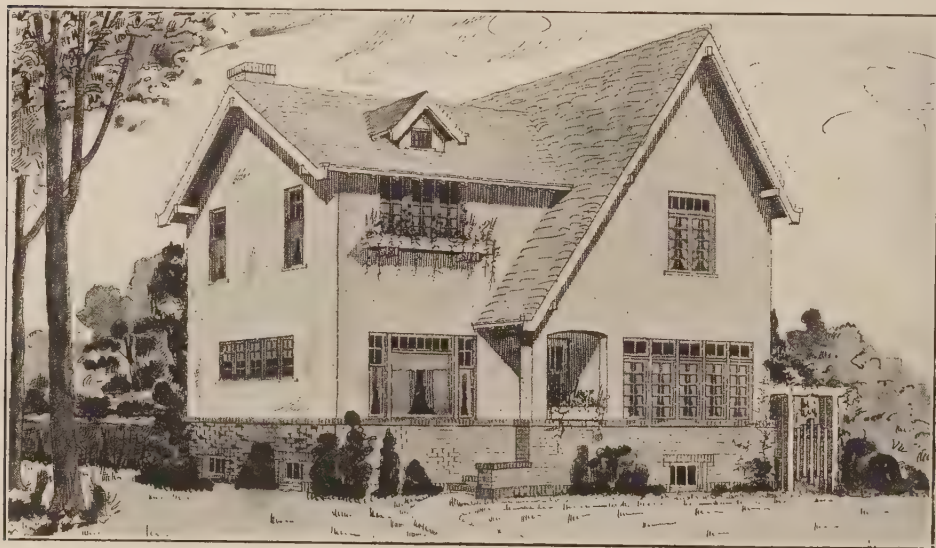


A Practical Little Plan

IN the plan illustrated we have a six-room cottage where every inch of space has been utilized. The entrance is through a covered stoop into a central hall. The large living room on one side extends the width of the house, with a group of casement windows in the center of the long

Under the main stairs are the basement stairs with a grade entrance, and an entrance to both stairs from the kitchen.

From the stoop at the side of the house is a side entrance opening into a passage way which connects the kitchen and dining room and gives access from the outside



The entrance is through a covered stoop.

W. W. Purdy, Architect.

side which are high enough to permit the placing of a davenport underneath. The fireplace with bookcases built in under windows fills the end of the room, while a large group of windows are opposite.

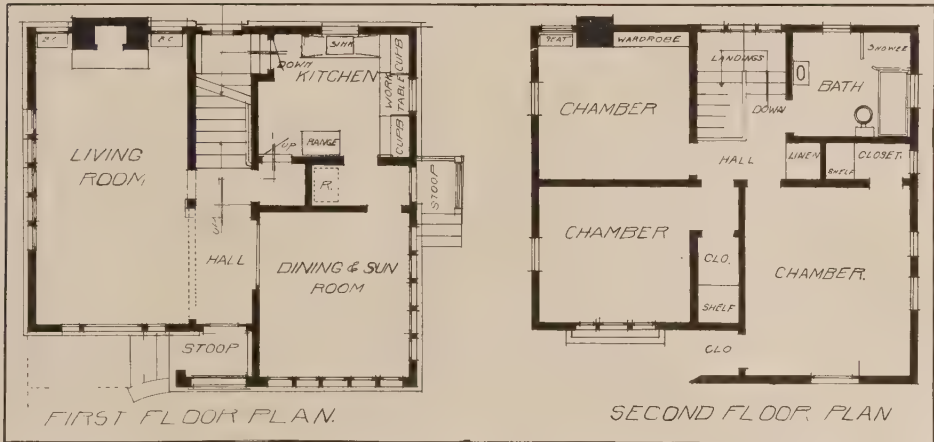
French doors open from the hall into the dining room, two sides of which being fitted with casement sash converts this room into an open porch at will and makes a sunroom of it at any time.

The stairs are cleverly treated so that a door to the kitchen opens from the landing at the second step, with ample space for hanging coats, etc., in this passage or closet.

for both. The refrigerator is placed in this passage way with a high cupboard built over. This makes it equally convenient from the dining room. This passage serves as a pass pantry and the outside entry aids in keeping odors from the front of the house.

The kitchen while small is very convenient with its built-in cupboards and work table. The sink is well located and well lighted with double drain boards, and so convenient to the cupboards that a second handling of the dishes is not necessary.

On the second floor are three chambers,



each being corner rooms with windows on two sides. A wardrobe is built into the rear chamber and a seat is built under the window. The larger chamber has two closets; all of the closets are large. The linen closet opens from the hall. The bathroom is fitted with a shower in addition to the usual fixtures.

There is a full basement under the house with laundry and fruit room, fuel bins, and a room for the heating plant.

The specifications call for white oak floor in the living and dining rooms, with quarter-sawn white oak finish. The kitchen is finished in natural pine, with pine floor for linoleum. The floors of the second story are of birch, while the finish is of pine enameled with birch doors stained mahogany.

The exterior is of rough cast white cement plaster over metal lath above the brick work which is carried up to the first story window sills.

A Bungalow That Is Different

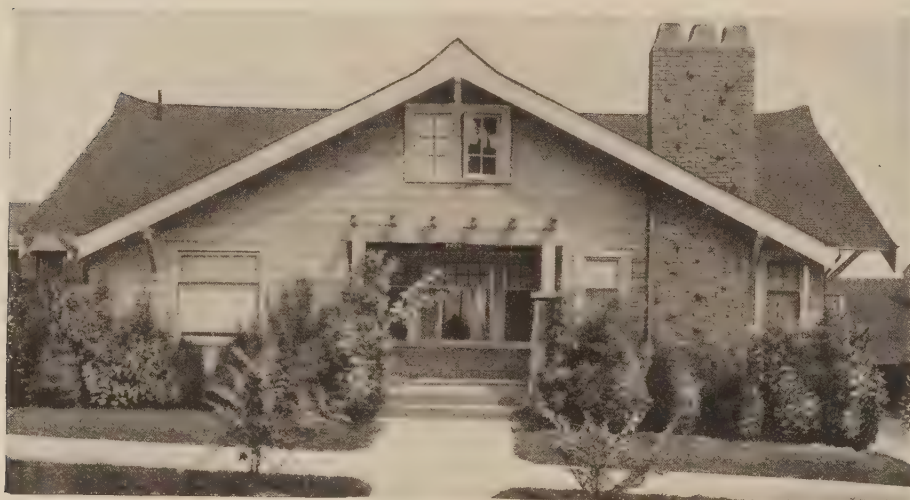
IN the photograph is shown a very attractive home, the original of which was built in Seattle at a low cost, and yet has, even at a glance the essential atmosphere of a home. It is charming in outline, in detail and in texture.

This house comes up close to you—it is friendly; the roof droops down till you can well-nigh touch it and there is an agreeable familiarity in every detail, with nothing cold, forbidding or distant; it fairly talks to you. Half the charm of bungalows is due to this quality; they seem so near to one, so sociable, and so agreeable, like a friend that is never cold; a different atmos-

phere from that of mere "houses."

Nor will the reader be disappointed upon investigating further. Every need is provided for; a basement that is light and serviceable, a roomy and useful second floor, making a warm, durable, thoroughly practical home.

This bungalow is peculiarly adaptable to a corner lot, or one with at least fifty feet of width. It will be noticed that, exclusive of the porches, the house is thirty-eight feet wide and thirty-two feet deep. The rear entry in this case is at one side, rather than behind the house—an arrangement that has a number of advantages. Notice



It is charming in outline, detail and texture.

Jud Yoho, Architect.

the front porch too—it is such a satisfying relief from the stereotyped projecting sort. The projecting brick piers and pergola are just enough to dress up the front and avoid what would otherwise be a flat and less interesting facade.

The texture of the walls is very pretty indeed. The design calls plainly for a rough texture. The shingles are laid alternately in wide and narrow courses, for the body of the walls, and clinker brick is used for the masonry. The design, too, calls for light colors. In the house illustrated, the shingles of the walls are stained silver gray and the trim, including sash, is white. The roof may be light green, brown or slate. The effect of such a com-

bination is very pleasing and attractive.

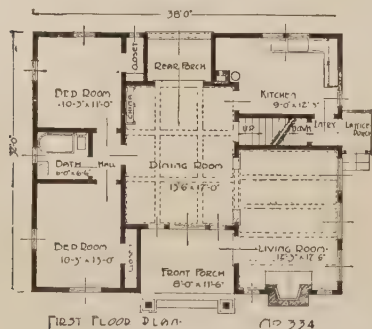
The shrubbery around the house adds immensely to the effectiveness of the design. Banked against the walls in profusion, it sets the house off splendidly.

Within doors we find a very good arrangement, with the five large rooms on the first floor, the two big bed rooms and the sleeping porch upstairs, and a half basement underneath.

The recessed rear porch is a feature that will please many, especially in mild climates. In more rigorous climes this porch can be enclosed with removable glass sash and converted in winter into a breakfast room, a sewing room or a little conservatory, as fancy may dictate.

The two principal rooms are rather large in size. The pedestals in the archway between the two rooms are cleverly used for two little book cases. The dining room is paneled and both principal rooms have beamed ceilings.

As the living rooms are well lighted, the woodwork is finished in mahogany. The little hall between the bed rooms is white enamel. A sash door to the bath room lights the hall. The bed rooms are very dainty and light in lead blue.



A Brick and Stucco House

IN this design a rough Oriental brick is used from the grade line up to the sill course of the first story windows. It is used as a veneer outside of the sheathing. Above this sill course the walls are finished with cement stucco on metal lath.

While it was first intended to build a cottage and was so planned, the effect of the

is a wide group of windows at the front, while a columned opening with bookshelves recessed from the living room side connects with the dining room beyond. The sun room is fitted with casement sash with transoms over. The dining room has grouped windows.

Beyond the den and opening from the



Rough Oriental brick and stucco.

Chas. S. Sedgwick, Architect.

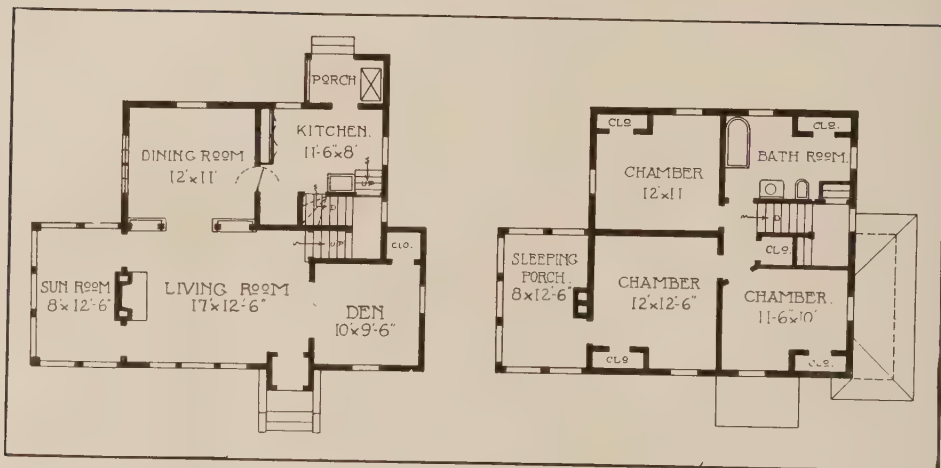
two-story glazed porches has been to make a more imposing house than was expected, and to make it seem larger than it really is. The main part of the house is 25 feet each way and the sun room is 8 feet by 12 feet 6 inches, the sleeping porch over being the same size.

At the right of the entrance is a small den connecting with the living room by a wide opening, and having a good closet. The living room extends across the front of the house, being 17 feet by 12 feet 6 inches in size. A fireplace and the openings to the sun room fill one end of the room. There

living room is the main stairway. Steps from the kitchen connect with the landing. The basement stairs are under, with an entrance at the grade level.

Stairs both to the second story and to the basement open from the kitchen. Oftentimes the housekeeper prefers to arrange the kitchen equipment in accordance with her own methods of doing her work. She might prefer the cupboards in the niche by the stairs leaving more wall space for table or working shelves. The refrigerator is on the rear porch.

On the second floor are three chambers



and a glazed sleeping porch. Closets are built under the low roof. The bathroom is quite good sized and its closet may be used for linen.

The first floor is finished in fir, stained, and has oak floors. The finish for the sec-

ond story is of pine, white enameled.

The roof is shingled and stained a dark reddish brown with creosote stain.

All outside trimmings, cornices, casings, etc., have the same stain. There is a full basement under the main part of the house.

The Usefulness of the Bay



A cozy convenient home.

Bungalowcraft Co., Architects.

THIS design shows one of those large, cosy, convenient homes, all on one floor, with good storage space in the attic, which is reached by a scuttle and removable step-ladder.

This home was arranged, the architect tells us, by a lady—a housekeeper and a home maker—who has arranged even the smallest details with the thought of saving steps and effort. A noticeable feature is the placing of the cabinet kitchen almost in the center of the house, easily reached from either the living room or the bedrooms and in direct connection with the dining room. The screened porch off the kitchen is also an inside porch making it easily screened or glazed, while the bed rooms are corner rooms with cross ventilation. The bath room connects directly with two bed rooms and is reached from the hall as well. The linen closet opens from the bath room.

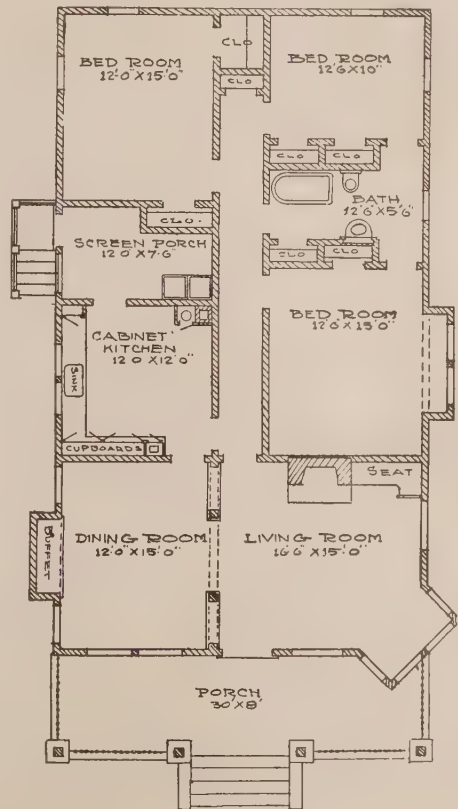
The little square bay in the living room is appreciated by Madam who uses it for a sewing and reading nook. Book cases are built into the buttresses of the opening between living and dining rooms. A seat is built in beside the fireplace in the living room. The buffet in the dining room is recessed in a bay, with windows on either side. Another bay gives better light and air to the bed room which is not a corner room. Two closets are provided for most of the bed rooms—another luxury due to the thoughtful arrangement of Madam.

Set tubs are placed on the screened porch by the kitchen, making it into a convenient laundry. A cover over the tubs, which may be hinged to turn up against the wall, makes a convenient table when the tubs are not in use. Notice that the range boiler is enclosed where it stands beside the chimney. Perhaps nothing in the kitchen catches so much dust as the unprotected range boiler.

As this house was recently built for a physician, the room just back of the living

room was arranged for an office with a side porch where the bay window is shown and a door cut through from the living room where the seat is shown.

The exterior of the house is weather boarded with brick used about the front



porch. The roof is shingled. The architect tells us that this house has been built several times in California for \$2,200, and in Wisconsin with a warmer construction and a furnace for \$3,000. With the constantly increasing cost of building materials any figures quoted can only be taken as giving relative values.

With a Side Porch

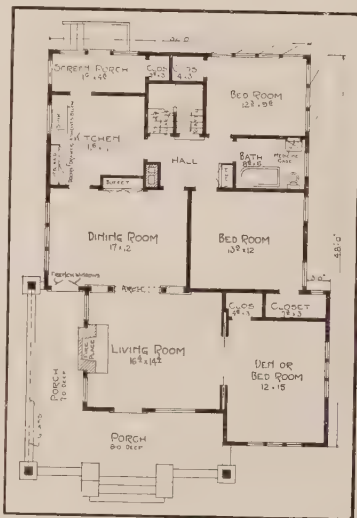
FOLLOWING a California custom which might be useful in any place where there is a prevailing wind, the side of the porch, only is glazed. This side porch can be screened giving complete privacy, or the end or the entire porch can be glazed as is usual in the colder climates.

The big porch does away with the necessity of an entrance hall, giving a free access to the outside which is especially desirable in a mild climate.

The living room has a good fireplace and many windows. Sliding

doors separate the den from the living room in such a way that it may be used as a sleeping room if desired. It is a large room, 12 by 15 feet, and can be used as a general utility room or may be made into a music room or library. It has a good closet which will be useful in any case.

Beyond the living room and separated from it by a columned archway is the dining room. It opens on the glazed porch by French doors, giving an outside entrance to the room. A group of windows fills one end of the room. A built-in buffet is recessed in the wall



The big porch takes the place of an entrance hall.

E. W. Stilwell, Architect.

opposite the living room. Beyond the dining room is a small hall around which are grouped the sleeping rooms and bath, with the linen closet opening directly in the hall. The stairs both to the basement and to the attic space open from this hall and it communicates with the kitchen as well. Each bedroom has good closet space.

The rear corner bedroom is really a sleeping porch, with its outside walls filled with casement sash.

The kitchen is well equipped with cup-

boards and built-in shelves and drawers; the sink is well lighted. A screened rear porch gives outdoor working space, and has a useful closet in connection.

The basement extends under two-thirds of the house, and there is a good attic space, nearly eight feet at the most.

The flower boxes make an attractive feature of the house. The porch is of brick and the planting and vines have been very well handled to add to the attractiveness of the house.

Homes of Individuality

Selected by W. J. Keith, Architect



With the hospitality of the Colonial times.

With a Gambrel Roof

A SURPRISING amount of room can be planned under a gambrel roof.

While it is economical of space it is not easily handled. Few other problems give a more severe test of the skill of a designer than the building of a successful gambrel roof. There are no exact rules for the proportioning of the two roofs nor of their angle with each other, only that they must be right.

The residence illustrated herewith is a representative and distinctive example. It embodies in pleasing proportions modern and traditional colonial features. The cream color plastered walls give a sunny yet cool appearance, while the graceful sloping roof adds an air of hospitality.

The main entrance gives into a reception hall, flanked on either side by the living and dining room. Running the full depth of the house, the living room, with its open

fireplace of simple colonial design and windows on three sides, makes a truly enjoyable apartment. The dining room is on the garden side of the house, and communicates with the kitchen through a completely equipped pantry.

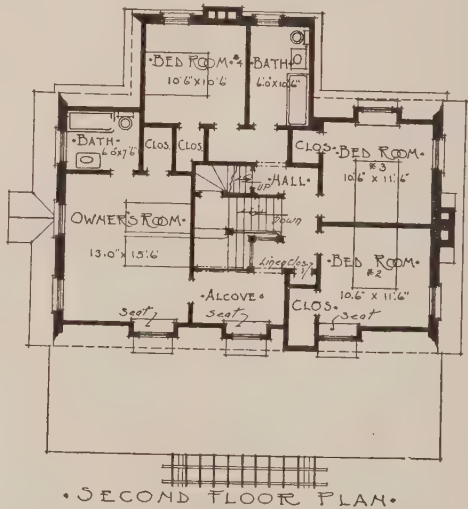
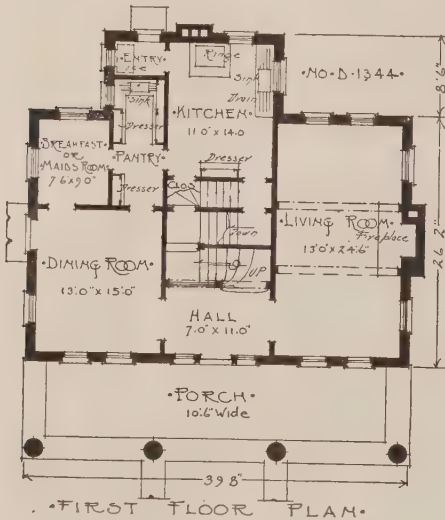
A small room, which can be used for either a maid's or breakfast room as desired, opens from the dining room and pantry. Complete culinary equipment is provided in the kitchen with refrigerator space in the rear entry. A large closet is provided for pots and pans and a dresser

appearance. The outside entrance to the dining room is hooded and enclosed with the roof carried over the window.

Only part of the carriage porch is shown on the plan, the broken line indicating the omission. This carriage porch is pergola covered, with vines running up the great posts. One end of the porch has been glazed as shown in the photograph.

With a Brick Porch

The effectiveness of a little brick work is often far-reaching if cleverly handled. This brick porch gives almost the effective-



for the kitchen service. For ready access to the second floor a stairway leads to the landing of the main flight, under which descends the cellar stairs.

An owner's room with private bath, three bed rooms and a general bath are shown on the second floor. Ample closets are provided for each room, and all except the rear bed room has windows on two sides.

Over the rear stairs are the stairs leading to the attic where two additional rooms and a bath are arranged.

This house is constructed of hollow tile and plastered with cement mortar. The usual frame construction with cement plastered over metal lath would give a similar

ness of a brick cottage. It is well treated and rather unusual in its general form with its wide-spreading arch.

It is planned largely with its magnificent living room, recessed staircase at one side, and wide entrance opening to the dining room on the other; generous fireplace at one end, and triple window at the other end, make an interior unusually pleasing.

The dining room has a deep sideboard built in under windows, with a closet at each side giving an effect of deeply recessed windows. Between the dining room and kitchen is a butler's pantry with cupboards and a good working shelf under the window.



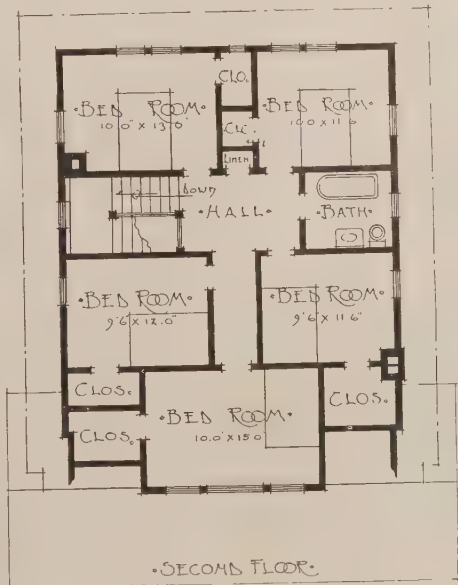
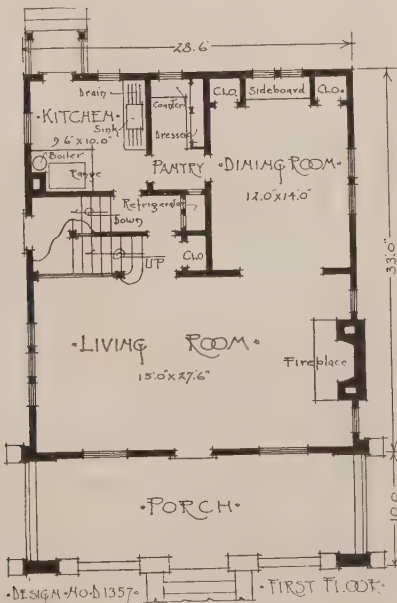
The brick work of the porch is effective.

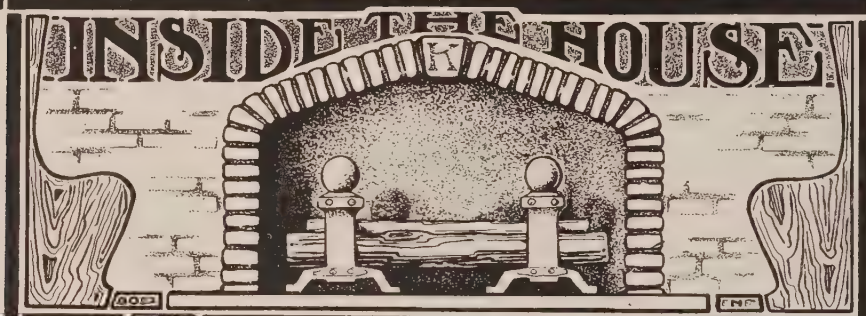
The kitchen itself is fully equipped and connects directly with the basement stairs in the side entry, which has a grade entrance, and is easily reached from the main stairs. The refrigerator is in this entry and a coat closet is convenient.

On the second floor are five bed rooms

and a bath. Each bed room has a good closet, and the linen closet opens from the hall.

The wide overhang of the eaves makes a very effective treatment. The dormer with its group of windows, gives height for the front chamber.





DECORATION *and* FURNISHING

Conducted by Chas. Burdick, Decorator.

Simplicity and Suitability in Furnishings

CANNOT you recall having visited at the home of a friend, a home of wealth where cost need not be considered, the different rooms littered with a hodge podge of expensive furniture, some in the mission style, others in fine old mahogany and Circas-

sian walnut, each piece a work of art and beautiful in itself, yet absolutely out of harmony with the other pieces in the rooms? Rare oriental rugs covered the floors, the windows were smothered with exquisite hand-made laces and deep toned velvet hangings, and beautiful pictures

adorned the walls, yet the home lacked simplicity and harmony and the guest immediately becomes restless.

One of the American vices is said to be thoughtlessness or at least a lack of broad perceptions. It is evident that the furnishings of this home had been purchased for their individual beauty and without the least thought or consideration of their suitability to their future environment.



An example of simplicity and repose.

INSIDE THE HOUSE

To avoid such conditions may be the reason why decorators often insist upon following out a period style in the average day rooms.

But why should we strive for a style or period (except, perhaps, our own dear Colonial) of which the majority of home makers know nothing and care less. The architect in planning the interior of the average medium priced house of the 20th century is restricted, on account of cost, to a convenient and pleasing arrangement of living room, dining room, sun room and service quarters, and possibly a den or library, and the result is generally a charming ensemble without any definite architecture or period, and offering an abundance of repose and comfort. It is the simple yet suitable treatment of such an interior that we wish to dwell upon.

Treatment of the Wood Trim.

As to the treatment of the standing wood trim, if oak be used, as is so often the case, it may be finished in a fumed oak shade or a soft tobacco brown and rubbed with wax. If preferable it may be finished in varnish and rubbed down by hand (not with a stiff brush) to a dull soft luster. Above all things avoid the garish yellow oak with the high gloss varnish, as it will surely spoil any decorative scheme.

If the wood trim is of white oak a charming and inexpensive effect may be obtained by leaving the wood trim natural and applying wax well rubbed in. The result is a pleasing grayish tan shade that harmonizes beautifully with gray or putty colored walls and mulberry hangings. Old ivory finish with the doors, mantel board, tops of side-



The same fire gives comfort and cheer to both rooms.

board and radiator grilles done in mahogany is becoming a favorite treatment, especially where the interior of the house suggests the colonial. It is poor economy to apply this treatment to a soft wood trim as the sap or pitch (no matter how much shellac is used) is liable to work through in time and discolor the virgin purity of the enamel. Birch doors must necessarily be used to obtain a good mahogany effect and the additional cost of birch over soft wood for the small amount of woodwork remaining, is not worth considering.



Selection of Colors

The study of color is a most fascinating one and will well repay time and thought. Figured paper of variegated colors presents great difficulties when the subject of draperies and floor coverings is to be considered.

It may seem strange, but a plain paper in a good textile or fabric weave is much more difficult to select than a figured one. As I have often said to our subscribers "always consider your walls simply as a background" and do not allow the wall hangings to represent over one-fifth of the decoration of the room. Color has a wonderful furnishing power and its possibilities are limitless. As vertical stripes will affect the height of the room so will different colors apparently increase or decrease its dimensions.

When the home builder is in doubt and cannot secure the services of one who knows, a "harmony of analogy,"—a one-color treatment is always a safe and satisfactory solution of the problem. A living room suggestive of repose, comfort and cheerfulness may be obtained by a gradation of tints and shades of one color relieved by touches of a contrasting color.

A living room all in shades of brown would be charming. The floor and wood trim in dark oak, the rug, a good domestic, in solid deep toned brown, perfectly plain, with the border composed of two plain bands of deeper brown, with a sharp line of black outlining the extreme edge, walls in golden brown, with the window hangings in plain velvet or sunfast slightly deeper than the wall color and the ceiling in deep cream. To relieve the monotony contrasting colors should be introduced in the smaller furnishings. Supplement with a few small but choice rugs showing tones

of olive greens or dull old blues with the sofa cushions in shades of olive green or tans and blues combined. Cover the lamp shades in a golden tan silk, edge with a dull gold metal galoon and in a far corner where the light will strike it, arrange a plaque or bowl of polished copper. Simplicity is the keynote to this charming room, yet it should be distinctive and beautiful.

The accompanying interior is an example of simplicity and suitability, where repose, charm and decorative interest are well set forth. Here it will be seen that the figured wall adds beauty and variety to this charming room without detracting from its quiet serenity.

The simple and pleasing wood trim is treated in fumed oak stain and waxed, while the narrow oak floor is in the same dark tone. The keynote of this livable room is the heavy Donegal rug with the figured field in soft two toned fawn and the plain border in a deeper fawn and mulberry.

The walls are hung with a figured paper in a two toned putty shade which is finished with a dull transparent overglaze which gives it a very soft luster, not unlike a silk and wool damask. The well executed stenciled frieze is in oil colors on a soft gray ground, carefully worked out by hand in mulberry, tan and ivory with a suggestion of dull blue.

The feature of the room is the unusual treatment of the fireplace of rug-faced brick, the hearth built up above the level of the floor with the gothic opening extending through to the sun room, the same fire giving comfort and cheer to both rooms at the same time.

The entire east end of the room is of glass hung with sheer lace and simple draperies of deep old rose velvet, this group of windows giving a profusion of sunlight as



well as a charming view of garden and parkway.

Before leaving this restful room attention should be called to the well designed library table of mahogany with the beautifully proportioned supports arranged in pairs at each end.

The Sun Room

Passing through French doors which are placed on either side of the fireplace we enter a most charming sun room with five large windows all set at different angles, as this room is octagonal in shape. These windows have one sash only, the sills raising on a hinge, permitting the entire win-

dow to slide down out of sight. With gay striped awnings at each window, can you imagine the cool comfort this room offers on a hot summer day?

The walls are hung in a cool gray green grass cloth paper with gorgeously colored Chintz curtains for the window hangings. Just enough drapery to relieve the bareness of the room and yet not enough to interfere with the sunlight and summer breezes.

The cool wicker furniture in natural color has thin loose cushions covered with the same chintz. Wicker fern holders containing movable metal boxes are arranged in front of the windows and on the mantel.

Buying by Proxy

Keith's Guide on Home Decoration and Furnishing Brings Some Notes from the Shops

Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration," a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given *free of charge*. Enclose stamp for reply. Write on one side of the paper only.

Notes on Summer Furnishings



OO much care can hardly be taken in the selection of summer furnishings. The essentials are coolness and simplicity. The most pleasing feature of the season's offerings in chintz and cretonnes are their cheerful, refreshing colors and the large variety of patterns, especially in the bird and foliage treatments. Gorgeously colored birds on a black and white ground are shown in profusion in the leading shops. Slip covers of cool chintz to slip over hot stuffy chairs are very effective as well as economical. The majority of these fabrics are washable and will retain their freshness.

Reed and willow go hand in hand with

the fabrics and this light and cool furniture is now being shown in a wide range of shapes and finishes. It is surprising how attractive the low priced but serviceable willow in the natural color can be made with a thin pad of bright chintz. This popular make of porch and bedroom furniture can be found to match the thinnest purse.

Grandmother's "turkey mats" or the round and oval rag rugs of our childhood days are becoming "quite the caper." These pleasant reminders of days long past are made of strips of wool or bright colored cretonnes, braided by hand and securely cross-stitched and are offered in an unlimited variety of sizes and colors. They are much thicker than the old style square

INSIDE THE HOUSE

rag rugs, lay perfectly flat and are washable. The heavy wool rugs in deep rich colors are being introduced quite extensively in the day rooms while the delicate colored cretonne mats are more appropriate for sun rooms and chambers.



Three-fold screen, 18 x 72 inches, ivory enamel; filling of cretonne, in pink, gray and mauve, \$9.50. Domestic cretonne, 32 inches wide, pink, gray and mauve, 35c yard. Domestic taffeta, 36 inches wide, soft rose pink, 35c yard. Dotted white etamine, 45 inches wide, very fine quality, 60c yard. On extreme left, white "snow flake" with pink lover's knots, 36 inches wide, 30c yard. Willow arm chair in natural color, with magazine or sewing pocket on one arm, \$9.50. Dress box in old ivory enamel, covered with cretonne in pink, gray and mauve, 45 inches long, 16 inches high and 18 inches deep, \$10. Sewing basket of flat wicker in old ivory, \$4.50. Sewing stand, \$3.50, and foot stool, \$2.00; both in old ivory enamel and cretonne. Grandma's "Turkey Mats," pink and white with blue band; 30 x 60 inches, \$5.00; 24 x 36 inches, \$2.50.

The Window Problem

The tendency of this generation in the matter of window hangings is toward simplicity with the doing away with the stuffy, dust-collecting overdrapes of years ago. The new treatments with the shallow pleated valances or the stiff flat lambrequins and the narrow half-width side curtains is very favorably received.

Your architect has planned the windows as a feature of the house and if you are fortunate enough to have them over-

look a smiling garden or a bit of water, this charming vista should be as carefully handled as a valuable painting and the window sash should be considered the frame. Therefore, do not overload the window with superfluous hangings. Also

it is well to consider the effect from the outside as well as from the inside. The old time opaque window shade is being dispensed with to a certain extent and soft translucent draw curtains of amber colored casement cloth operated with traverse cords are being substituted. This material comes in soft silk, silk and wool and beautifully mercerized cotton in all colors, but the putty colors, soft creams and deep ecrus are preferable.

Casement windows from the standpoint of the architect are certainly very attractive but to the decorator, especially if they be in-swinging casements, they are a bone of contention. It is here that our old friend, the roller shade, proves him-

self a nuisance and we must relegate him to the store room. A small rod attached to each swinging window will take care of the simple lace curtains while to the frame a little above so as to clear the swinging windows may be secured the rod to carry the overdraperies. These draperies should be lined to shut out the strong light and arranged on rings to draw so as to take the place of the discarded window shade. The outward swinging casements give little trouble

INSIDE THE HOUSE

and are coming into more general use.

In the day rooms panels may be substituted for net curtains. In place of the rods small metal frames may be made of common band iron which is secured to each casement with screws. If these frames are galvanized the panels may be washed with soft sponge without removing them from the metal frames and without the danger of rusting. Sunfast and tubfast fabrics for the window hangings are very much in vogue and are proving a boon to the housewife who wishes to throw open the doors and windows and let in the fresh air and sunlight without harming the draperies. These sunfast fabrics may be obtained in a wide range of colors and patterns; the perfectly plain light weight gauze effects and poplin weaves being most in demand.

Door Treatments

How often do we see arches hung with masses of fabric, grotesquely draped and trimmed with heavy bands of galoon and elaborate dust-collecting cords and fringes that mean nothing but useless extravagance. The arch is not simply a passageway that should be concealed, but should be treated as an architectural feature, offering a pleasing vista between two rooms. If it is necessary to have portieres, they should be made of velvet or a heavy weight sunfast fabric and hung in simple, straight folds.

The portieres have a mission to fulfill and should be arranged on traverse rings and cords so as to close readily.

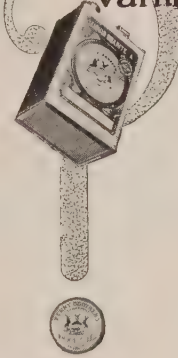
* * *

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* * *

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The Answer to the Varnish question-



THE question of varnish is vital for the home builder as the appearance of the interior depends more upon the finish on the woodwork than on the furnishings.

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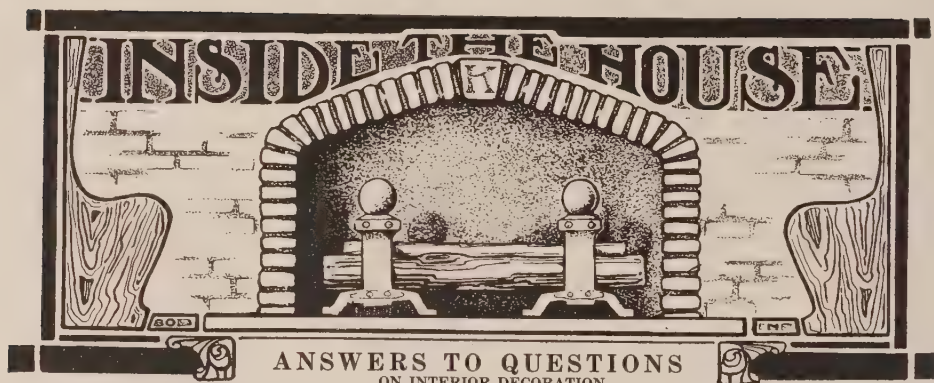
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Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

A High Ceiling.

J. U. Am writing for advice as to wall decoration in flat wall paint for our living and dining rooms. Both rooms are finished in natural curly birch and with ten-foot ceilings. The living room has triple windows to west and a square bay with five windows to south, one long narrow window to north. The dining room has triple window to the south and a terra cotta brick fireplace.

Ans. Answering yours in reference to decorative scheme, would suggest that you treat your dining room in an Empire green (not olive), which would harmonize nicely with your rug. A plate rail or chair rail may be placed about five and one-half feet from the floor with an Empire green burlap filling this space. The upper wall may be painted flat in a lighter shade with the ceiling in buff. If you do not care for so much green the upper wall may be in tan. A four or five-inch cove moulding in bass or white wood may be placed at the angle of ceiling and wall. This cove should be finished in the ceiling color and one or two fine green lines may be introduced in the angles of the cove moulding where the shadows would appear when nailed into place. This cove moulding is generally carried in stock by sash and door concerns and the cost is nominal. When properly treated this cove gives an effect of a heavy plaster cove and adds character to a room. This moulding may be given a more massive effect by adding a small pine picture moulding under the cove on the wall and a similar

moulding on the ceiling, treating it as part of the cove.

This color scheme would blend nicely with terra cotta brick mantel and the cherry wood trim. This room would also look well in dull old blue, old blue burlap below with the upper blended in a lighter shade with cove and ceiling in ivory. The draperies to be in velvet or sunfast in old blue. The rug for this treatment may be in an oriental pattern in cream and blue.

The living room has plenty of light and may be treated in soft warm gray or putty color with hanging in mulberry or deep old rose. An Anglo Persian or Hartford Saxony rug (both domestic) may be purchased that will harmonize beautifully with this scheme. Chintz or cretonne hangings in all-over floral design showing birds, parrots, etc., and carrying plenty of color, will look stunning with a gray wall. Dark tan or soft brown with hangings in solid brown of a deeper shade or chintz hangings will make a charming living room.

I would certainly use the same cove moulding in this room and treat it in the same manner. A plain pine seat built into the bay window and covered with a loose cushion and plenty of pillows will make a pleasant lounging place.

Mission Finish.

C. E. H. I would greatly appreciate suggestions in regard to the wall decorations, woodwork and furniture of the dining room and hall of the enclosed rough diagram. The house faces east and a porch extends across the entire front. Fireplace



More and more white enamel is being used in the better homes

—the room in the picture is one example. It is worked out in the highly popular Adam style.

The walls are Gray Tint Mellotone—ceiling a combination Gray Tint and White—floor white oak, finished natural with three coats of "Little Blue Flag" Durable Floor Varnish—woodwork, Linduro Enamel White.

Pearl colored net with mulberry overhangings—rug in which browns, reds and tans predominate—and mahogany furniture—complete this room, which to look its brightest and best should have southwest exposure. In the execution of high class work, there's a never-failing satisfaction in

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Write for the "House Outside and Inside" showing in the actual colors the room pictured above and others just as attractive, with information about the products used in the finishing.

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INSIDE THE HOUSE

in the living room of red tapestry brick. We had thought of mission finish. Is that as good as it has been?

Ans. Answering yours in regard to decorations, would say that "mission" finish applies mostly to a certain style of furniture which is heavy and massive and severe in treatment. Mission furniture is generally finished in fumed oak, Kaiser gray and occasionally black or Flemish.

If your wood trim is along these straight simple lines and in oak, would suggest that you finish it in fumed oak and wax. This is the most common treatment.

The living room and hall, stairway and upper hall may be papered the same, either in gray or tan. Gray walls with rose hangings will make a nice contrast. If the walls should be done in tan or brown, would suggest that the hangings be in a deeper shade of brown. In either case, wicker furniture in tobacco brown or old ivory with cushions covered in chintz or cretonne will be charming. Chintz or cretonne with lots of color will make a splendid contrast with the gray or brown walls.

The dining room will be very pretty if done in cream and blue with the cream predominating. If you have plenty of sunlight in this room it could be carried out in old blue with success.

A Cottage in the Woods.

A. K. I am enclosing sketch showing ground floor plan of cottage I am building in the woods in northern Wisconsin and also sketch showing end view of the living room.

This cottage is situated at the edge of a lake and is surrounded by pines.

Kindly suggest treatment for the living and dining room. This room has ceiling and sides covered with beaver board with fireplace in one end built out of concrete and cobble stone.

The doors and windows are not finished as I had not fully decided on how to finish the interior. I had thought of putting in seats in the corners under the windows next to the fireplace.

Will you help me further by advising as to proper dimensions for fireplace in end

of the living room (ground floor space 12x24 feet and 8 feet high). I had planned on making this fireplace with a cobblestone facing as I will probably have to do the work without the help of a skilled mechanic. I would like to have the fireplace be in keeping with the size of the room.

Ans. We should give the woodwork a simple finish, the one coat finish that stains and dull-lacs in one application. The charred or fumed effect without stain would also be very appropriate but much harder to apply properly.

Then, on the natural beaverboard we would use a stencil decoration of small pine trees running around the tops of the walls as a frieze. The paneling of the beaverboard could be so arranged as to fit this frieze. In the October, 1914, issue of KEITH'S MAGAZINE, page 265, such a decoration is illustrated and we have seen such effects in California cottages.

The seats you propose will be very good indeed and we would make cushions for them of green burlaps; also use it to draw across the windows in place of shades, pushing it up to the sides when shades are not needed. Then with some of the rugs having fibre backs and wool tops in plain green with a simple border in black, the room will be artistic. It would add to the effect if this room opened into the front bedroom with an arch and curtains of the green burlaps, instead of a door.

Since the living room is not a large room, though large enough, we think a chimney breast 6 feet wide with heavy oak shelf 5 feet from floor would be the proper outside dimensions. The size of the fireplace opening depends on the fuel you will use. If wood a larger opening than for coal.

Bed Room Draperies.

C. E. B. There are two large windows in the southwest bedroom, and the furniture is in the "two-tone" ivory enamel with cane panels. The overdrapes to be in a deep rose, silky material and the shade of the bed-side lamp is lined with the same.

I also wish to make a spread and bolster cover for the bed and pillows for the shirt-waist box and reed chairs. Would you ad-

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INSIDE THE HOUSE

wise me to make these of the rose color material or would a cretonne or chintz be better? And also, would it be permissible to use a gate-leg table in the living room by the open stairway (in the Jacobean finish)? The dining room is furnished entirely in Jacobean oak except for a reed fern stand and tea wagon.

Ans. The southwest bedroom in ivory and rose is lovely, but the deep rose is rather warm for those exposures. We advise a wall tint of either soft dull blue or soft green, with cretonne for the reed chairs, etc., combining rose and green in soft pastel tones. We do not admire the entire bedspread of cretonne, but would have an ivory cotton taffeta banded all around with the cretonne and a band on each end of the bolster. Then you should have a rug combining the two shades. We remember a room treated in this way that was very charming and Frenchy.

In regard to the living room, the reed chairs would not at all conflict with the mahogany pieces, but are frequently so combined. We suggest, however, one wicker fireside chair and for the other, one of the new combination antique cane and mahogany in the Jacobean finish, with rather a high back in three cane panels. The gate-leg table will be perfectly all right, but we should think one of the half circle gate-legs that set up against the wall would be better in that position.

The Nursery.

W. H. A. Will you please give me help with my new home? You have a sketch of the ground floor. I should like a columned opening. In the nursery I think I'll have ivory woodwork and tile fireplace; what color for walls and tile do you suggest? What about Dutch or French doors?

Ans. Dutch doors are divided across the middle, the upper half glass. French doors are glazed to the floor and in one piece.

We should advise you to keep the cased opening and use hangings, as there are always times when it is essential to shut off a dining room, especially with children. Or, you could use French doors glazed with small square panes, which would be still better. They are very much liked now between living and dining room instead of portieres and cost no more. You can have it open above the bookcases if you wish, but I would not. Another place where I would use French doors would be in the dining room opening on the porch instead of the large window you have there. We should not advise such heavy beaming of living room; cornice around ceiling and a cross beam each side the fireplace would be much better. Your sketch seems to show the nursery opening on the stair landing with two steps up, and of course a door there. We think the mirror on the coat closet door would be inconvenient for use, though it might look prettier than on the nursery door.

In this nursery, an old blue and pink color scheme would be pretty with fireplace tile in dull soft old blue and ivory woodwork.

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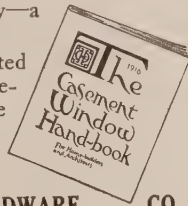
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INSIDE THE HOUSE

HOUSEHOLD ECONOMICS

A Catch Clip for Holding the Ironing Board Cover.

ONCE upon a time, as they used to say in the old stories, there was a very busy woman. There were a good many things that she "didn't like to do." She frankly said that she was not of the class of women who were willing to sacrifice themselves to any extent in order to keep her house as her mother's house was kept. She did not neglect her house but she respected her own feelings in the matter. The little device which is shown here resulted from her policy of finding a way around the disagreeable things. For one thing she dreaded to take the cover off the ironing board and put on a fresh one. Each time, she would begin her ironing, instead, while she felt like it, and then she was too tired to do it when she thought about it again, and so the time would go until the cover was scorched and so brown that it really was not fit for the dainty clothes, and was not in keeping with her otherwise immaculate kitchen.

At last it occurred to her that if she had some kind of a simple little catch which would hold or release the cover easily it would not take such mental ef-



The clips hold both ends of the cover.

fort to change it. She began experimenting with a little metal strip which could be screwed to the under side of the board and which should have a grip either at one or both ends. The results she worked out are embodied in the small devices shown in the illustrations.

The clip shown under the magnifying glass in the first cut is made for use on a small board or one where the cover is wide enough that the edges come within a few inches of meeting when the cover is spread neatly around the board. The metal strips are screwed firmly to the board in the center and set closely enough to keep the cover taut when its edges are caught under the clips.



The clips catch the cover on one side only.



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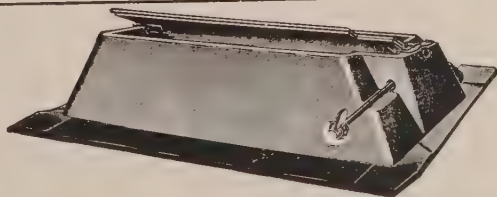
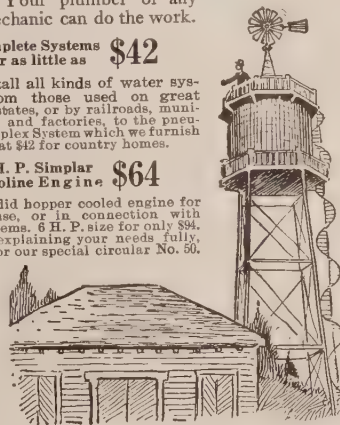
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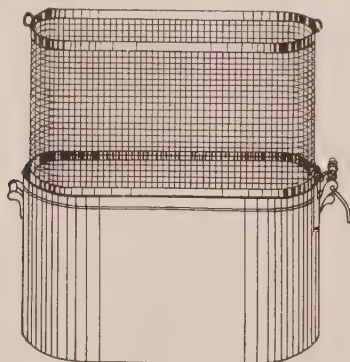
INSIDE THE HOUSE

Owing to the shape of the ironing board the edges of the cover are apt to come much nearer together at the small end of the board, in which case it may be better to fasten the edges separately, when the second form of the clip may be used. This is screwed fast at one end and has the clip on the other. The little points hold several thicknesses as well as they do a single thickness.

It takes no longer to put a set of the clips on an ironing board than it took to change the cover each time in the old

as much good syrup over them as the jar will hold, screw on the top of the jar, pack them in a wash boiler which you fill with water and boil for an hour or so? If so you will be interested in a wire basket which fits inside the boiler, in which the jars can be packed safely and easily.

Of course the real intention of this drain basket is for use on wash day so

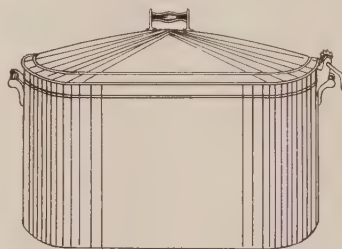


The drainer raised.

way, and when they are once on, the cover can be changed as often as you wish with little trouble and annoyance.

A Drainer With the Wash Boiler.

In the berry season do you fill glass fruit jars with the fresh berries, then pour



The device for raising is shown near the handle.

that the clothes can be drained and lifted out without the use of the broom handle or stick, according to the old fashioned usage. If you have scalded your hands and your feet through the unmanageableness of the unwieldy stick you may be glad to find another way to get the clothes out of the boiler.

By a simple device near the handle the drainer is raised to the top of the boiler without lifting. "A child can raise it" is a point made by the manufacturers.

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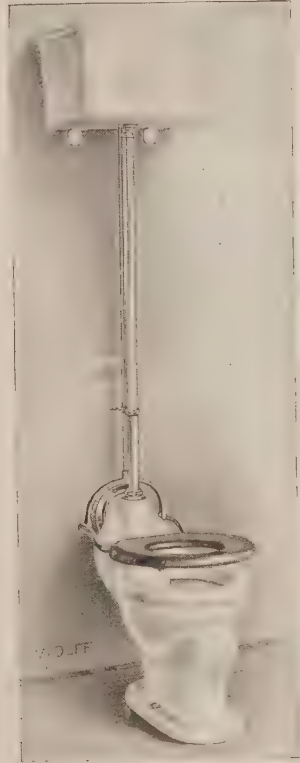
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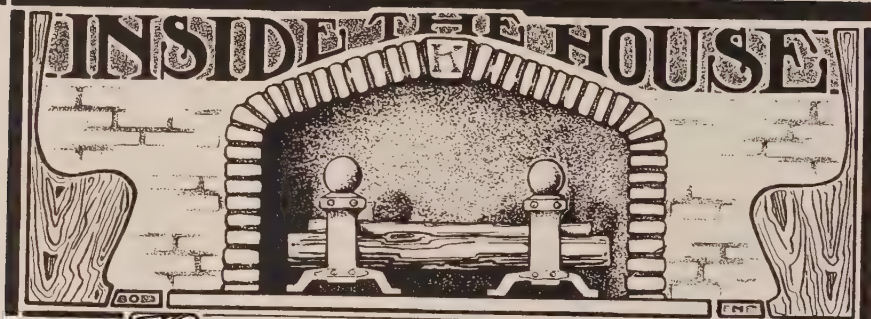
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THE TABLE AND ITS SERVICE

Conducted by HELEN F. LITTLE

The Perfect Cup of Tea

SOME time ago we had a good deal to say about coffee making, an art in which instruction is much needed. Making good tea is less complex but the process is not always understood. And afternoon tea, getting to be so popular, is too often a rubbishy decoction.

There is an old rule, "a teaspoon to each person and one to the pot," but tea made in that proportion, if the leaves are of the best quality, is apt to be unnecessarily strong. The better the tea, the less required, and the heavy India and Ceylon teas are impossible if made too strong. So it is well to experiment with the tea of your choice and then decide upon a rule for making it, which gives just the proper flavor.

It is a good plan to have a special tea kettle for boiling water for tea. Otherwise you are never certain of freshly boiled water. If your family is not too large you can buy a tin tea kettle holding perhaps a quart for ten or fifteen cents.

Such a kettle is not, of course, a permanent possession, but with care will last a good many months, and as its bottom is thin it boils very quickly.

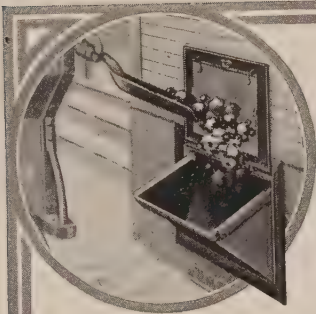
If you are fastidious and do not have to be economical, you will remove the tea grounds or have the tea poured off the leaves into a well-heated pot as soon as it has steeped from four to six minutes, and make a fresh pot of tea later. If you are frugally minded the tea pot will be

filled up with boiling water as soon as the first cups are poured. But whether you have the tea served in the pot in which it is made or poured off the leaves, use an earthen pot, because it retains the heat so much better. If you have a cherished silver tea service use



The tea tray and service.

the tea pot for boiling water. You can find all sorts of passable looking earthenware teapots, the dull green ones being very pretty, but for afternoon tea you need something more ornamental. You can find very pretty flowered china pots with tea cups to match, which are the best



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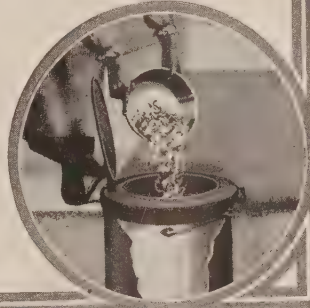
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INSIDE THE HOUSE

possible accompaniment to a silver tea service. If the tea pot does not match the cups and plates it must harmonize with them. If you have one of gray green cameo Wedgwood you should use green and white cups, blue ones with blue Wedgwood, and so on.



The tea cart.

Tea Trays and Covers.

Now that the permanent tea table in the drawing room has gone out of fashion the tea tray has come to its own. It is a very simple matter to have it already arranged in the dining room so it can be brought in at a minute's notice.

Everyone would like to have a Sheffield tray, and those of us who cannot may console ourselves with the thought that a metal tray is extremely heavy. Next in the order of elegance is one of the oval mahogany ones, antique or reproduced. Care must be taken not to set a hot tea pot on such a tray or to spill liquids, as they develop ominous white stains. Trays with a mahogany edge and a bottom of glass covered cretonne are very pretty,

and to be had in great variety, and the cretonne can match the furnishings. They, too, require care, as heat may crack the glass. Trays bought in the wood can be painted and enameled in delicate or brilliant colors, mauve, apple green, turquoise blue, sealing wax red, as suits the china. The various wicker trays have bottoms of solid wood and are very good looking as well as serviceable. Last are the circular trays of woven bamboo splints, light, strong and inexpensive.

To supplement the tray have a wicker "curate's assistant," the little stand with a handle at the top and rings supporting three or four plates for cakes, sandwiches or bread and butter. The plates should match the other china.

Even more convenient is the tea cart, as it saves so many steps. This ingenious device is made in several types. First it was a little tea table with wheels under one end. The other end must be lifted in order to move it. This tilting of one end was likely to spill the cream if the pitcher was quite full or make trouble in moving it so that many prefer a four-wheeled model of which the front and rear wheels merely guide and support the table. The difficulty with this type is that unless there is a lock on the wheel it sometimes moves when it is not intended to do so. A surprising amount of room is afforded by the upper and lower trays.

A handsome tray cover adds much to the looks of the tray. It should be carefully fitted, of heavy linen or damask, with embroidered edges and a monogram or initials at one side, and similar doilies should be provided for the cake plates.

Plate Doilies.

When a handsome tablecloth is discarded there are always pieces of border and at the ends which are not worn at all. They are just the thing for making doilies for bread, cake and cheese plates. The edges can be scalloped or edged with a narrow linen lace, and the making is good pick-up work. Sometimes a whole luncheon set can be gotten out of the good part of a tablecloth.

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200 VIEWS



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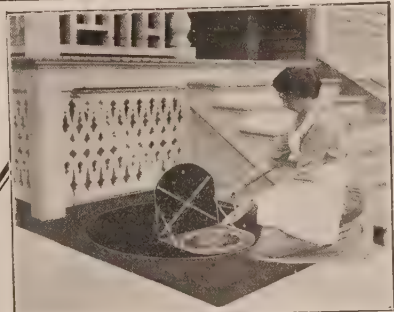
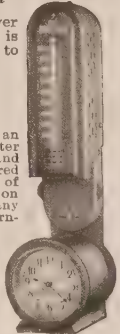
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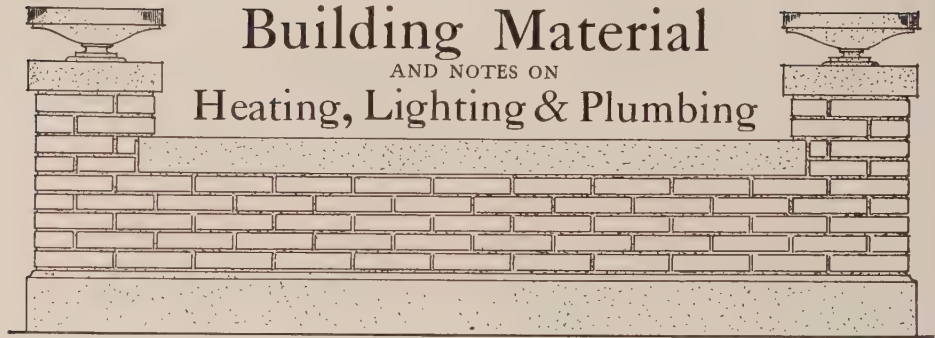
contains five steel cans on a revolving frame. Capacity 6 bushels. Use separate cans for ashes, garbage and refuse. Installation very simple and inexpensive.

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Districts open for representatives.



Painting Our Modern Lumber

John Upton

IN the early days when great forests of white pine covered the part of the country which was developing and must be "cleared," the trees were cut and sawed into boards, formed into rafts and floated down the rivers, remaining in the water from six to eighteen months. The result of this immersion was the removal of the sap and the liability to shrinkage and other deteriorating influences. After being removed from the water the lumber would be stacked and air dried, becoming the ideal lumber for building and painting.

One need not be an old man to recall the time when it was expected that the lumber on the outside of a house would be good, clean, white pine, and there were no especial problems of adapting the paint to the lumber as we have now. It was then the common practice to use lead and oil paint, generally mixed on the job. The painter could know what materials he was using in those days, before we had so much mixed stuff, called "paint."

We are told that we can still get white pine if we care enough about it to do so, but when we look about us, and see what kind of wood is being used for houses today, we find Western Soft Spruce, Red Cedar (which is red but not cedar), Arkansas Soft Pine, Red Wood, Cypress, Douglas Fir, Basswood, Gum, Yellow Pine and Hemlock, all of which are used to some extent on the outside. Besides these, we find Poplar, White Wood, and Cottonwood used on the inside.

These may be divided into three general classes in regard to painting.

First; White Pine and those of a similar nature, as Basswood, Poplar, White Wood, and some of the Arkansas Soft Pine which is practically free from pitch. Some of the Western lumber as Douglas Fir might come in this class if free from pitch, which is simply resinous oil in the wood which prevents other oil from penetrating.

Second; there is the pitch pine class of lumber, Yellow Pine, Hemlock and Spruce, in fact any lumber having much pitch.

The third class consists of Red Cedar, Redwood and Cypress, as each presents difficulties of its own. In some cases they might be put in with the pitch class.

The first, or White Pine Class is not difficult to paint, as any good paint should give good results if properly applied. The main point is to use plenty of oil. The White Pine of today is not like that of former days, and we must shellac the knots, make the priming coat thin, and use three coats.

In some places Basswood is used for outside work. For this the primer should be thin without much drier so that the oil can penetrate the wood.

It makes a difference whether the pitch is in knots and streaks, or whether it is evenly distributed through the lumber. In the former case we can shellac the knots if they are not too numerous or too large but sometimes where the wood is exposed to the sun this is not a good



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idea for the pitch will work out and break through the paint so it would be better to get rid of it, either by the torch and scraping, or by using benzol as a wash brushed into the knots the same as shellac and afterward the paint scraped off.

If the work can wait a month or more before painting the sun will draw out some of the pitch so that it can be scraped off. In fact, much of the trouble coming from our modern lumber could be avoided if it were left to the weather for a time before painting, or even if it were given one or two coats of paint and then left for a time to show how it would behave. Then it could be treated with the torch and scraped when necessary and finished as desired to give a good and lasting result. Taking into consideration a term of years this could be done at less cost and look better than if it were finished up at once with three coats of paint and then left, with all the defects which may develop, in the first painting of new lumber. The main point is to get a good foundation or priming coat that will stay, not only in places but all over. Then the finishing coats are a simple problem.

"The two woods that stand out prominent as trouble makers for the painter are Cypress and Southern Yellow Pine, the former being of a resinous nature and quite largely inoculated with a greasy oil, which makes it practically prohibitory to paint by the usual method and procure results. Southern Yellow, or pitch pine is truly what its name implies. We often find it so charged with pitch and resin that it actually becomes over-fat. In such cases when exposed to a strong sun in its natural state, it may be doubted if any known process can keep the pitch from coming through to the surface."

This applies to a less degree to all of the second, or pitch pine class of lumber. It is not necessarily more difficult to paint, but it needs a different treatment. "The real problems of painting must be met in the use of twenty-five per cent material and seventy-five per cent man." In other words there must be an intelligent diagnosis of the trouble. In this class the pitch or resinous matter is all through the lumber and when the sun shines strongly on it, the pitch softens and works to the surface and will loosen the paint unless precautions have been taken to prevent this. Some claim that

straight white lead paint will do the work and so it will if the wood has first been properly treated.

One way is to paint it over first with Benzol and then rub off the loosened resinous matter but this is somewhat expensive.

Another way is to harden the pitch by using a coat of liquid dryer. Some would add red lead to the white lead priming coat using equal parts by weight of white lead in oil and dry red lead. This would give a pink color but could be made darker. As the red lead is a drier no other should be used.

Some would use a straight red lead priming coat with a little turpentine. This makes a good foundation for the next coat. I think this is the method used for freight cars when sided with yellow pine.

If one does not wish to use the dry red lead it can be had in paint form the same as the white. When white lead is used in the priming coat it is well to add a little Benzol ($\frac{1}{2}$ pint to a gallon) just before using. This will help the paint to penetrate more and get a better hold. If it were not for the expense the best way might be to use the torch over the entire surface to draw out the pitch, and then scrape it off. While we must consider this question of expense we should at the same time remember that it is cheaper to get the lumber in proper condition for paint, before the paint is applied than it is to lose the cost of the paint and the labor of applying it to a surface where it will not stay.

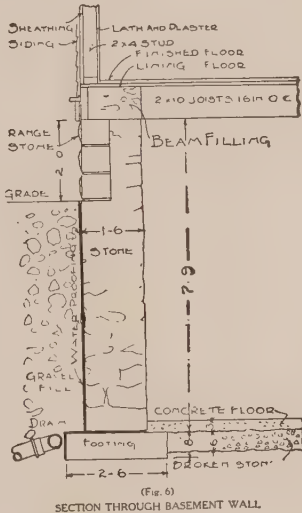
Spruce presents some problems of its own. There is likely to be some pitch in this wood, somewhat more than others. In being run through the planer it is compressed in places. These places will rise when wet, and if they are wet before being painted, they will not only loosen the paint as they do when they swell up after it is applied. A little turpentine and some 5 per cent of Benzol can be used in the primer for spruce.

Of the third class the wood called "Red Cedar," when kiln dried, is very porous and requires special care that the pores may be filled. The paint must be thinned so that it will penetrate, and should not dry too quickly; in fact, rather more than the usual time should be allowed for this.

The pigment of the priming coats

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(Fig. 6)
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should be fine so as to be absorbed into the pores, not merely close them at the surface. Then the second coat should have a little more turpentine to get more penetration.

Redwood may be primed with 20 per cent of turpentine, 70 per cent raw oil, and 10 per cent Benzol, for the liquids. The paint should be quite thin and brushed well into the wood.

Cypress is in some respect different from other woods. It contains a large amount of soft resinous matter which prevents ordinary paint from penetrating. It acts something like Yellow Pine only more so, as the troublesome resin is all through it. This could be removed by a wash of Benzol or may be hardened by a coat of Japan drier, to which a small amount of oil might be added. Or the primer may consist of equal parts white and red lead with the liquid 60 per cent raw oil, 30 per cent turpentine, and 10 per cent Benzol. If red lead is not used more Benzol may be needed. Cypress dries out unevenly and so is apt to deceive one. It may be dry in some places and not in others. All paint for Cypress should be rather thin and have plenty of time to dry.

These ideas can sometimes be carried out where the exterior of the house consists of one or two kinds of lumber but in some cases we find several varieties and all the different classes of wood used on one house, and if one were to treat each differently, he would need, not two paint pails, but several; yet if one gets the general idea that the pitch must be taken care of and the pores of the wood well filled he can do good work under most conditions

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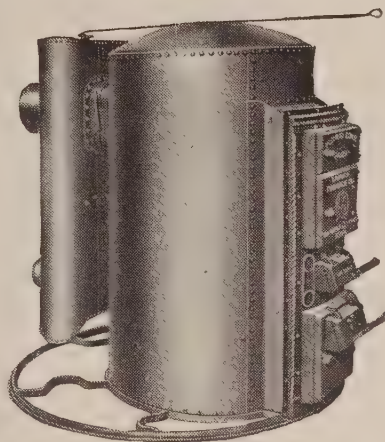


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WOODS

AND

HOW TO USE THEM



EDITOR'S NOTE.—When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH's staff of wood experts.

This department is created for the benefit of KEITH's readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

More Interesting Treatment for Wood Exteriors.



IN a late number of the *Minnesotan*, the publication issued by the Minnesota State Art Commission, is a very interesting article by Mr. William Gray Purcell, A.I.A., advocating a better knowledge of local materials and the greater use which would follow the greater knowledge. This applies equally to other states than Minnesota. We quote the following: "I would like to include in any consideration of materials a plea for some real constructive experimenting in new methods for using wood as exterior material in domestic work. Not because we are anxious to find novel combinations for wooden siding but because the ordinary types of siding in common use are so very uninteresting, and if wood is to hold its own in popular favor with brick and plaster some really decorative use of the material must be found. In Switzerland, Norway, Russia and Japan wood is used in really beautiful ways and on our own Pacific Coast much interesting experimenting with wood has been done. With us the field is virtually unexplored. If someone will make a start others will follow.

All these paragraphs about good business, real sentiment; joy in the thing we have made, are not worth writing and less worth reading unless we put them into action.

Neighbor—home builder—with small funds and a small problem, are you going

to leave the thinking to someone else, and content yourself with another repetition of the clapboard box, or are you going to show us how to use white pine with some charm and distinction?"

The Forests of Alaska.

The supervisor of the Chugach and Tongass national forests in Alaska, Mr. W. G. Weigle, has given some information about Alaskan forests which is very interesting to those who fear for the life of our national forests.

Logging in Alaska can be carried on the year around, according to Mr. Weigle, and as yet the industry is in its infancy and hand logging prevails. The fact was noted that several donkey engines are now in operation, though logging operations have not extended more than four thousand feet from the waterfront, even with the use of machinery.

The area under this supervision is so vast that it extends from a longitude three hundred miles west of Seattle to a longitude west of Honolulu. Excluding the barren mountain peaks and the world's greatest glacier,—which lies in these regions,—these forests comprise about twenty-one million acres in the two units, and occupy the coastal regions of Alaska. Mr. Weigle noted the fact that the removal of the forest cover was immediately followed by the almost total erosion of the soil down to bedrock during the rainy season, the rainfall in this region is very heavy, thus the reforesta-



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tion problem must have early consideration.

"Sitka spruce is the principal species logged; it forms about ninety per cent of the annual cut on the national forests in Southeastern Alaska. These trees often reach a diameter of eight feet and a height of 200 feet, while the spruce that is logged will usually average about 2,600 feet. Salmon canneries in Southeastern Alaska consume the greater portion of this output of spruce. The slowly-grown Western red cedar of Alaska produces such excellent shingles that no measure of its durability has yet been obtained, according to Mr. Weigle, for no shingled roofs in Alaska have ever failed. Little use has been made of the excellent stands of Alaska yellow cedar.

The popular conception of interior Alaska as a barren ice field with arctic temperatures is not borne out by the stories Mr. Weigle told of the luscious to-

matoes grown in Fairbanks. The summer temperature in this region, according to Mr. Weigle, while warm, is much more comfortable than that of the summers in the Middle Western states, and where forest fires have not ravaged the country, heavy forests of birch, spruce, larch, pine and poplar cover the hills as far back from the rivers as the eye can reach.

Sanitary Handling of Timber.

Wood which has become infected with rot-producing fungi during storage is becoming a serious danger to the building industry. Mr. C. J. Humphries, pathologist, Bureau of Plant Industry of the Department of Agriculture, has issued a warning to builders and to lumber dealers. He says, "Timber which shows any traces of decay should never be sold or accepted for building purposes, as even dormant fungi in dry timbers can often start into active growth when placed under moist, comparatively warm conditions."

"The investigations of this Department during the past two years have revealed many deplorable conditions in the storage of timber and, coincident with these, have disclosed many serious outbreaks of rot in important structures. While many of these cases of rot in buildings may be due to faulty construction, particularly to insufficient seasoning of the timber before use and to the failure to provide for sufficient ventilation in basements, the fact remains that infected timbers placed in buildings are far more likely to cause trouble than sound ones."

"One of the most important problems confronting the lumberman, then, is the storage and marketing of his product in as sanitary a manner as possible, both to prevent direct loss to himself through deterioration of his wares, and to protect the consumer against many avoidable outbreaks of rot after the timber is incorporated into buildings."

Why Wood Rots.

Decay is due to the growth of wood-destroying fungi through the timber. These fungi consist of fine cotton-like threads which penetrate the wood cells and by the secretion of ferments dissolve many of the constituents of the wood. For their most active growth the timber must be moist and the temperature favorable.

Statement of the Ownership, Management, Circulation, Etc., Required by the Act of Congress of August 24, 1912,

Of Keith's Magazine on Home Building, published monthly at Minneapolis, Minn., for April 1, 1916.

State of Minnesota, County of Hennepin—ss.

Before me, a Notary Public in and for the state and county aforesaid, personally appeared M. L. Keith, who, having been duly sworn according to law, deposes and says that he is the owner of the Keith's Magazine, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, to-wit:

1. That the names and address of the publisher, editor, managing editor, and business managers are:

Publisher—M. L. Keith, Minneapolis, Minn.

Editor—M. L. Keith, Minneapolis, Minn.

Managing Editor—M. L. Keith, Minneapolis, Minn.

Business Manager—M. L. Keith, Minneapolis, Minn.

2. That the owner is:

M. L. Keith, Minneapolis, Minn.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are:

None.

M. L. KEITH.

Sworn to and subscribed before me this 23d day of March, 1916.

MARCUS P. STARK.

(Seal)

My commission expires Jan. 25, 1922.

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Colonial Entrances	September
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THE advantages of a daylight day have been discussed on this side of the water, but without any result in the United States. According to comment in the current press, Germany and probably Austria and Holland set their clocks ahead one hour on the first day of May, as does the city of Winnipeg, where the railroads find it necessary to keep their old time.

This will mean that the man who gets up at seven by the clock, (if the clocks had not been changed he would think himself terribly abused in getting up at six), will go through the day in the usual way, but will find it still light at ten o'clock of the long day, as light, naturally, as it usually is at nine o'clock.

Without apparently changing their daily routine as ordered by the clock, the inhabitants of these countries will, in fact, arise an hour earlier each morning, and retire an hour earlier each evening. They will have an hour more of daylight for recreation in the late afternoon.

The time-tables will not have to be changed in the least. All the ordered things of life—the hours for meals, for evening gatherings, and so on—will be precisely as before, except that in fact an hour of light will be redeemed from slumber, and an hour more of darkness devoted to it.

This change of time continues for six months. The first of October the clocks will be set back an hour and the short days of the winter will have the same adjustment of daylight to the working day that we have always known.

Window Box Suggestions.

Flower boxes at your windows require only plain wooden boxes, nine inches deep, twelve inches wide and of proper length to fit the window. Inch holes should be bored through the bottom, and small pieces of charcoal and broken pots placed in the bottom to insure proper drainage, which is very important. Fill with sifted soil, one-third sand, two-thirds top soil from the garden.

Before putting earth in the box white-wash the inside of the box. This not only keeps a wooden box from rotting, but prevents insects.

Lucky He Did Not Put in a New Furnace.

He was renting a small house which the landlord had refused to repair. One day the owner came to see him.

"Jones," he said, "I shall have to raise your rent."

"What for?" asked Jones, anxiously. "Have the taxes gone up?"

"No," the landlord answered, "but I see you've painted the house and put in a new bathroom. That, of course, makes it worth more."—*Exchange.*

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